

SOUTHERN AUTOMOTIVE JOURNAL

DECEMBER, 1955

Three Steps to Big Volume
page 29

Outlook for Atomic Cars
page 31

Servicing Locks and Keys
page 48

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SERVING THE 19 SOUTHERN AND SOUTHWESTERN STATES

increasing
its lead
every day!

TUE WED THU FRI SAT SUNDAY

U.S. Patents 2,639,022
and 2,699,825

New **PERFECT CIRCLE** type "98" chrome oil ring!

Of the 6,474,531 U.S. passenger cars produced from Jan. 1 through Oct. 29 more than half* were equipped with the new Perfect Circle type "98" chrome oil ring!

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Hagerstown, Indiana
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take a look at the record!

Year	FRAM	Brand A	Brand B	Brand C
1946	815,639	502,824	262,664	36,580
1947	1,276,672	879,475	353,396	66,722
1948	1,329,941	1,080,616	367,808	416,023
1949	1,569,967	1,170,256	283,973	510,815
1950	2,170,581	1,354,158	260,926	871,776
1951	1,749,412	1,367,642	349,924	857,248
1952	1,489,801	1,067,350	306,962	708,911
1953	2,063,229	1,315,660	245,478	964,896
1954	2,117,697	750,082	198,221	1,211,672
TOTAL	14,582,939	9,488,063	2,629,352	5,639,643

FRAM CORPORATION, Providence 16, R.I.
Fram Canada Ltd., Stratford, Ont.

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Volume 35

Number 12

TRICKS OF THE TRADE *from* PERMATEX



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Repair Cracked Batteries. Simply wash off the acid with water and apply Form-A-Gasket No. 1. Makes a strong, permanent repair job.



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More than 50 Chemical Products for Better Automotive Maintenance

FORM-A-GASKET[®] Universal Sealing Compounds LEAKPROOF—PRESSURE-TIGHT

Check tips like these for new ways you can use Form-A-Gasket, best sealant going for leakproof, pressure-tight assemblies. Form-A-Gasket resists gasoline, water, hot or cold oil—many other liquids and gases. And it's specially made to withstand the pressures of high-compression engines.

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No. 1. Sets quickly
—dries hard



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liquid—remains tacky

Hundreds of uses around the house, too

PUSH AMERICA'S FAVORITE

"Tune-up in a can"

FREES STICKY VALVES AND RINGS!

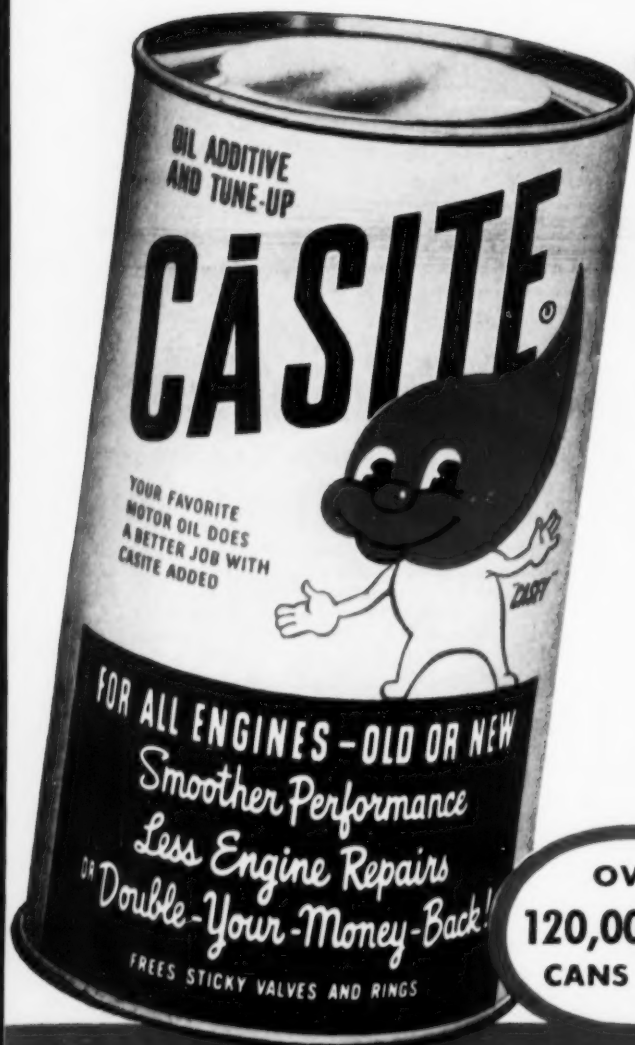
**GIVES SMOOTHER PERFORMANCE
AND QUICKER STARTS!**

Winter saps engine energy! Bring those cars up to par with a fast, low-cost Casite Tune-Up now!

A pint through the carburetor air intake, or in the gas tank—frees sticky valves and rings—restores pep and power.

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Boost your profits with Casite—the best non-mechanical tune-up sold. Casite gives your customers guaranteed results or Double-Their-Money-Back!



**OVER
120,000,000
CANS SOLD**

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Casite. Wear Reducer, Piston Rings, Oil Filters, Spark Plugs



SOUTHERN AUTOMOTIVE JOURNAL

Covering Automotive Sales and Service

Vol. 35

DECEMBER, 1955

No. 12

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The Biggest
Seller



THE FIRST . . . and still the MOST POPULAR,
MOST PRACTICAL, SIMPLEST, MOST UNI-
VERSAL tool of its kind made.

EVERLASTING . . . the first tools made over
25 years ago are still in service.



K. O. LEE CO.
ABERDEEN, SOUTH DAKOTA

If it's made by Lee it's a "Knock-Out"

Nobody throws away a
pair of shoes when the
shoe laces break . . .

no need, either, to
junk those faulty
tail pipes! Repair them easily with

**Quaker Supreme-TAIL PIPE
REPAIR KIT!**



4 numbers give
100% coverage!
No inventory problems

Install it in 5 MINUTES! Remove rotted
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PIPE REPAIR KIT over old tail pipe; move
back until the rear is even with bumper,
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MAKER in the industry! Packaged
individually boxed or in assortments.

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RIVETED or BONDED...you can't beat

American Brakeblok

You'll cut brake comebacks to the bone when you install American Brakeblok on *all* your reline jobs!

For American Brakeblok is first-quality, nationally-known brake lining, friction engineered to assure ideal stopping action for every make or model you're called on to service. Attractively boxed and clearly identified, each axle, car and truck set is precision made to go on fast...give smooth, sure stops...last miles longer.

Don't chance the safety of your customers or your reputation by using an inferior make brake lining. **Get the Best!**

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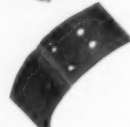
Bonded Lining. The finest available! Bonded to the shoe under factory controlled conditions, thoroughly tested. For all popular make cars and light trucks.



Riveted Lining. Formulated from the finest materials to wear slowly, respond instantly, on *every* braking system.



Truck Lining. Unsurpassed for long wear, freedom from fade. Instant acting, won't heat check or score brake drums.



Thick Blocks. First choice of leading bus and truck operators. Famous for long mileage. Requires fewer adjustments. Protects brake drums. Made in all sizes and types.

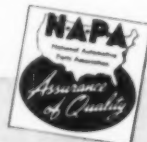
Your N.A.P.A. Jobber maintains stocks of all 4 types of American Brakeblok. See him for all your brake lining needs and watch your brake profits go up.

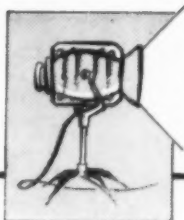
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AMERICAN BRAKEBLOK DIVISION Detroit 9, Mich.

PLANTS IN: Detroit, Michigan; Winchester, Virginia; Lindsay, Ontario; Gif, France





Automotive **SPOTLIGHT**

December, 1955

Increasing car registrations are fine, but not fine is the fact that the number of mechanics to service them is not increasing proportionately. What may be a big step in the right direction was announced late last month. A basic book of standards for mechanic training in the nation's schools is being distributed this month to schools. The book is a cooperative development of the automotive industry and the American Vocational Association. It was developed to help raise the standards of automotive service courses and it ranges from selecting and counseling students to shop layouts and the training of teachers.

The 2,000,000th Chevrolet built in U. S. plants this year came off the assembly line Nov. 25, an achievement never matched by any other manufacturer. This was the second time Chevrolet has ever turned out that number in a single year, the previous occasion being on Dec. 29, 1950--more than a month later than this year.

How the industry has grown, particularly in this year of record production (around 8,000,000 before the New Year's bells ring), is best told by this observation in the Chevrolet announcement: The industry was 20 years old before 2,000,000 cars had been produced by all manufacturers combined!

But getting cars to sell wasn't exactly the worry of many dealers this month, except those handling the \$10,000 Continental, whose demand has surprised even its doting factory sponsor, Bill Ford. While the dealers were faced with the likelihood of a heavy inventory (600,000 or more) of new cars upon entering the new year, their spokesmen were telling a congressional committee that the dealer-factory contracts were lopsidedly in favor of the manufacturer. And dealers are having a whale of a time holding to a fair net profit, the National Automobile Dealers Association said.

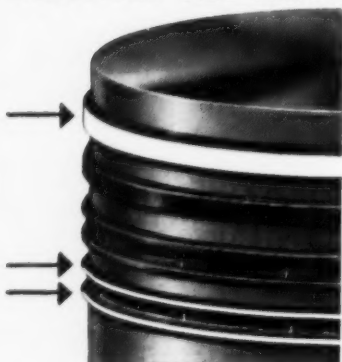
Said Charles M. Hewitt, Jr., assistant professor of business law at Indiana University, before a senate judiciary subcommittee studying GM, "Dealer franchises are unilaterally drawn by the manufacturer and designed to give maximum legal and economic protection to the manufacturer's interests. The dealers are not given any substantial legal rights."

The '56 Corvette, appearing next month, will have more power and racier-than-ever lines. Ford's Thunderbird may have to look more closely to its market with the coming of the considerably revamped '56 Corvette.

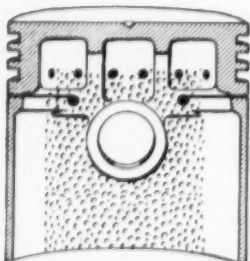
Reflecting the growing number of cars needing service, the sales volume of parts and equipment wholesalers continued this month to maintain a high level. Ninety per cent of the returns (page 104) to a questionnaire listed higher sales the first ten months of this year over the same period of '54. Car dealers and their car sales could sympathize with this statement by a Tennessee wholesaler: "It's the old, old story: You work your fingernails off and end up in the red!"

Quick Seating

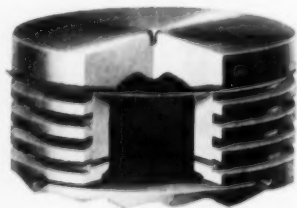
EVERY RE-RING JOB
DESERVES ALL THREE...



1. Kromex Ring Sets are the most economical, measured by miles. Factory-seated for instant oil control—chrome-faced top ring and oil ring side rails for longest wear.



2. Sealed Power SUPER-SIZER is the world's best resizing method, increases resiliency and outward tension on thrust faces, expands skirt to original close fit, leaves piston skirt surface smooth.



3. Sealed Power GI-60 Groove Insert is the only dependable, economical method of restoring top groove to original size and protecting against future wear.



Sealed Power KromeX

PISTON RING SETS...

assure your customer

- quick seating
- smoother performance
- faster pick-up
- double ring life
- maximum oil economy
- positive lubrication

assure YOURSELF

- better-satisfied customers
- more new customers
- no come-backs

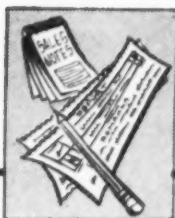
SEALED POWER CORPORATION • MUSKEGON, MICHIGAN

Sealed Power Piston Rings

BEST FOR RE-RING!

BEST FOR RE-BORE!

RINGS • PISTONS • PINS • SLEEVES • VALVES • WATER PUMPS



Automotive MARKETS

**When Noah sailed the waters blue,
He had troubles the same as you.
For 40 days he sailed the ark
Before he found a place to park.**

What more appropriate sign could you erect in your place of business than this, since it seems that we must wait patiently for the time when something concretely (in more ways than one) is done about highways, streets and parking facilities?

These words were recited by Governor Luther H. Hodges of North Carolina in his talk last month during the convention cruise of the North Carolina Automotive Wholesalers Association. He found his audience more relaxed than the usual land-based one, since he was speaking out on the broad Atlantic where there is ample parking space — of a type.

Maybe this sign would bring a grin to shop customers who have had to fight their way to your door. Anything to help the customers' tempers is worth trying, aye?

'56 to See More Income, More Outgo, Ford Executive Declares at Houston

"NEXT year people will earn even more money than they have this year, and they will spend more."

That comment by L. W. Smead, general sales manager of Ford Division, at Houston, Texas, last month was in line with the optimism expressed by car-factory leaders. Meanwhile, finance-company executives were generally forecasting that production of cars in 1956 would run around 7,000,000, or a million below the record 8,000,000 expected to have been rolled out this calendar year.

Consumer spending, which totaled 236 billion dollars in 1954 and 251 billion dollars in 1955, will rise to 261 billion next year, Smead predicted. He noted also that government spending will be increased by two billion dollars to total 78 billion dollars next year and that business spending will rise from 56 to 60 billion.

"These figures," he said, "represent a tremendous increase in the purchasing power of the nation next year and it is coupled with a significant change in au-

tomotive buying habits which make the prospects for our business look bright."

By 1960 Smead estimated there would be 54 million families in the United States, an increase of five million over today. In terms of population, he said, this means an addition of 15 million people — a number equal to the total population of Canada resulting from a birthrate of about 4 million babies every year.

"We are turning babies out at 480 per hour, or 11,520 every day, and we haven't even tried automation yet," he said.

Smead declared, "These statistics are better than just estimates. The people who are going to get married and start new families are alive today and growing toward the age when they will enter the automotive market. And the rate at which they do so will become even greater, starting in 1962 when the abnormally large war baby crop will begin to marry and establish homes. Our market in the 1960's will grow at an astounding rate."

Oldsmobile Ups Sutherlen; Clemeson Gets Southwest

VICTOR H. Sutherlen has been appointed assistant sales manager of Oldsmobile Division in charge of the western United States. Sutherlen was formerly Southwest regional manager with headquarters in Dallas.

George G. Clemeson, Chicago zone manager, succeeds Sutherlen as regional manager and H. J. O'Connell, St. Louis zone manager, has been transferred to Chicago as zone manager.

Finance Man Expects Fewer New Cars

LOWER production of cars is expected in 1956, according to an address last month by President Robert L. Oare before the American Finance Conference.

Said he:

"If we add up the 1956 goals as announced by the various factory spokesmen, it is clear that the manufacturers have gone on record for an even greater production of cars next year. Despite these factory announced goals and the general feeling that the year 1956 will be a year of increased national prosperity, most of the informed opinion seems to indicate that, in 1956, factory operations will slow down to a more moderate speed of about 6,500,000 assemblies, of which about 6,000,000 should wind up on the registration rolls.

"A domestic demand of 6,000,000 cars would still be a very good automobile sales year and would require about the same proportion of consumer disposable income as has been the average experience for the past seven years."

Dealers' Profit Decline

New-car dealers' profit before taxes dropped to 2.6% of sales for the first nine months of this year, compared with 3.1% the first six months of the year, according to the survey announced by the National Automobile Dealers Association.

THE CHRISTMAS STORY



It was lived one thousand, nine hundred and fifty-five years ago. It has passed from generation to generation, told and retold and told again through nineteen and one-half centuries of time. It has never grown old. Now is the season of this ageless Christmas story. Perhaps we all would find new meaning in our observance of the season if we set aside a moment for a simple rereading and remembering of this greatest story ever told.



**We of Associates
extend every good wish
to you and yours
at this 1955
Christmas time**

Associates

**Associates Investment Company
Associates Discount Corporation
Emmco Insurance Company
South Bend, Indiana**



Automotive

NEWS BRIEFS

"Tremendous Progress" of the South Cited by North Carolina's Governor

Currently serving an unexpired term, Governor Hodges is a former vice-president of Marshall-Field who resided at Spray, N. C., and was in charge of that firm's textile plants. One of the first things he did as governor, he said in an interview with editors of this publication, was to set up a "looking ahead" file. Here are excerpts from his talk last month during the Bermuda convention cruise of the North Carolina Automotive Wholesalers Association.

By **LUTHER H. HODGES**
Governor of North Carolina

HERE in the South we are making tremendous progress.

While our economic development started in a small way about 1900, our greatest progress has come since 1945. We now have 30% of the nation's population and about 25% of the industrial production. We have 15,000 manufacturing establishments making \$60 billion worth of products. In 1939, the figure was \$11 billion.

It is predicted that it will take another ten years (1965) to achieve our ratio of production to population — namely 30% of the U.S.A. total. After 10 years we

should be moving at a more rapid rate if we keep our vision, our courage and our ideals. I know that you are also immensely proud that the South is now "Economic Opportunity No. 1" instead of "Economic Problem No. 1."

Our resources are truly impressive. For example, we have 40% of the nation's water, 33% of the country's transportation, 30% of the forests, 80% of the natural gas, 75% of the nation's petroleum and 25% of the coal. At the same time, we are not utilizing effectively a great deal of these resources, but the future stretches ahead for all of us.

JANUAR	APRIL	AUGUST	DECEMBER
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Looking Ahead

Dec. 12 — Fall convention of Automotive Wholesalers' Association of Alabama, Hotel Whitley, Montgomery.

Jan. 28-Feb. 1 — Annual convention of National Automobile Dealers Association, Sheraton Park and Shoreham Hotels, Washington.

Feb. 6-9—29th annual National Auto Accessories Exposition, Navy Pier, Chicago.

Feb. 21-22 — Annual convention of Motor and Equipment Wholesalers Association, Sheraton Palace Hotel, San Francisco, Calif.

Feb. 21-22—Annual convention of National Standard Parts Association, Hotel Mark Hopkins, San Francisco, Calif.

Feb. 23-26 — Pacific Automotive Show, Civic Auditorium, San Francisco, Calif.

Feb. 27—Annual convention of Louisiana Automobile Dealers Association, Hotel Roosevelt, New Orleans.

March 14-15 — Annual convention of Virginias - Carolinas Automotive Wholesalers Association, O. Henry Hotel, Greensboro, N. C.

April 6-8—Annual convention of Independent Garage Owners of America, Hotel Lassen, Wichita, Kan.

May 10-13—13th Southwest Automotive Show, Coliseum, Houston.

May 12-13 — Annual convention of Independent Garagemen's Association of Texas, Houston.

May 24-25 — Biennial Southeast Automotive Show Conference, Asheville, N. C.

May 26-28 — Annual convention of South Carolina Automobile Dealers Association, Ocean Forest Hotel, Myrtle Beach.

June 3-6—Annual convention of Automotive Engine Rebuilders Association, Hotel Sherman, Chicago.

Sept. 30-Oct. 2—Annual convention of Tennessee Automotive Association, Gatlinburg.

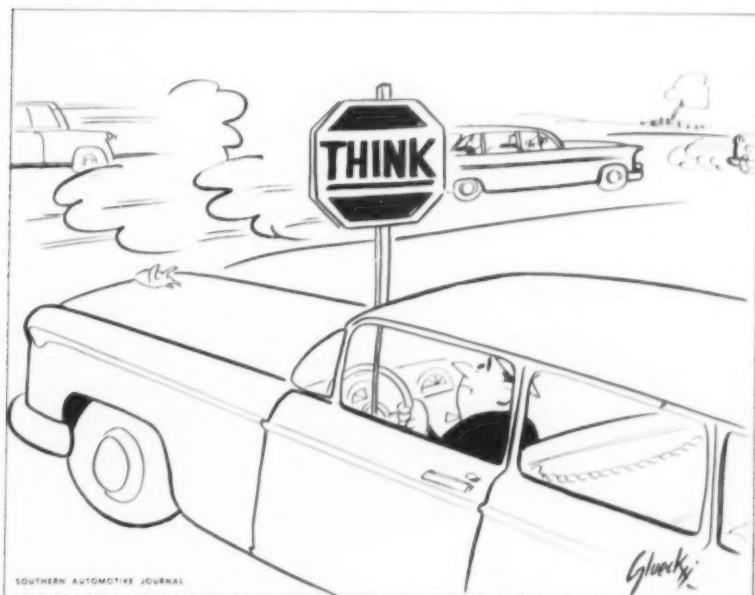
Oct. 21-22 — Annual convention of Oklahoma Automobile Dealers Association, Skirvin Hotel, Oklahoma City.

Oct. 21-23 — Annual convention of Florida Automobile Dealers Association, Fort Harrison Hotel, Clearwater.

Oct. 25-26 — Annual convention of Automotive Wholesalers of Texas, Dallas.

April 25-27, 1957 — Biennial Southeast Automotive Show, Dinner Key Auditorium, Miami, Fla.

May 9-12, 1957—Midwest Automotive Service Industries Trade Show, St. Louis, Mo.



Thank You...

ENGINE REBUILDERS AND AUTOMOTIVE JOBBERS

STORM-VULCAN, INC.

The World's Largest Exclusive Manufacturer of Automotive Engine Rebuilding Equipment
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SEASON'S GREETINGS.

We at Storm-Vulcan are sincerely anxious to let you know of our appreciation of you, our friends in the Automotive Industry.

You have made it possible for us to enjoy the biggest year in the history of Storm-Vulcan. We pledge ourselves to continue to manufacture the highest quality, most precision equipment at a fair price.

You have also made it a fact that we are the fastest growing manufacturer of Engine Rebuilding Equipment in the United States today.

To all of you who have made this possible, we extend our heartfelt thanks. May 1956 be a Happy and Prosperous year for you and yours.

STORM-VULCAN, INC.

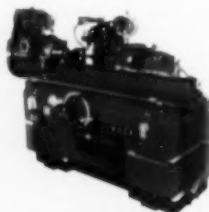
J. L. Tuttle

J. L. Tuttle
President

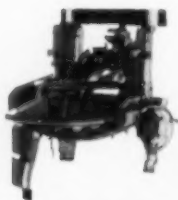
The Nation's Leading Rebuilders and Shops **STORMIZE** with STORM-VULCAN Machines



Models 15 and 15A
Crankshaft Grinders —
Top precision. Low-
est in price.



Models 75 and 75A
Camshaft Grinders —
For Automotive and
Industrial Camshafts.



Model 85 Head-
master — For fast,
accurate Head Mill-
ing.

Model JR-60
Turbo-Blast
cleaning ma-
chine — other
sizes for every
need.



Model D-1 Dynamaster
Engine Run-In and Test
Stand for all Auto-
motive and Truck
engines.





Inspecting a sample taken from the nation's first fully-engineered soil-cement road near Johnsonville, S. C., are (l. to r.): B. P. McWhorter, division engineer of the Bureau of Public Roads; C. R. McMillan, chief highway commissioner of South Carolina, and G. Donald Kennedy, president of the Portland Cement Association.

Soil-Cement Road Tests Stronger After 20 Years in South Carolina

REPRESENTATIVES of the South Carolina State Highway Department, the Bureau of Public Roads and the Portland Cement Association recently visited a 1½-mile stretch of state highways 41 and 51 near Johnsonville, S. C., composed of soil-cement and which tested stronger than when originally laid.

The occasion was the 20th anniversary of the nation's first fully-engineered soil-cement road. Reportedly in excellent condition after 20 years of weathering and increasingly heavy traffic, the Johnsonville paving is the forerunner of more than 10,000 miles of roads, streets and airports built with this material over the United States since 1935.

The Johnsonville road was built in 1935 as an experimental project under the joint auspices of the three groups.

Compression tests of samples cut from the pavement in September of this year reportedly showed that the soil-cement base had almost doubled in strength over the 20-year period. Specimens had an average strength of 922 pounds per square inch, compared with a strength of 480 psi for core samples

taken shortly after completion of the road in 1935, officials of the association said. "This increase in strength occurred despite traffic increases on the road from a few hundred to 2,900 vehicles daily."

In the period since 1935, nearly 160 million square yards of this mixture of soil, cement and water has been used over the nation for roads, streets, airports, canal and dam linings, embankment slopes, parking areas and for strengthening subgrades for other pavements. Its rapid increase in use has also resulted in development of specially-designed machinery permitting an unusually high rate of construction. The Johnsonville road utilized farm equipment for some phases of construction.

Expert Predicts Turbine In Trucks First

GAS turbine engines first will be used in heavy-duty trucks and later in passenger cars, according to Dr. Donald N. Frey, associate director of the scientific laboratory of Ford Motor Co.'s engineering staff.

Addressing a luncheon meeting of the fall convention of the In-

diana Independent Petroleum Association at Indianapolis, Frey said staff members of Ford's gas turbine department have a firm conviction that the numerous problems of design, performance and cost of gas turbine powerplants for vehicles will be solved.

"This does not imply that any of the problems involved have been satisfactorily solved as yet," he said.

Frey also stated that the engine used in passenger cars and trucks of today, "in spite of its maturity will be improved substantially in the future."

"We can expect, for example, that the internal combustion engine of the future will be more compact, of greater efficiency, of increased compression ratio and of higher horsepower than the present excellent engines. Therefore, the gas turbine must compete with these future engines."

Mercury to Enlarge St. Louis Plant

THE size and production capacity of the Mercury assembly plant which serves the Southeast will be increased by more than 25%.

F. C. Reith, Mercury division general manager and Ford Motor Co. vice-president, said expansion of the St. Louis, Mo., plant will provide a capacity of 900 Mercury cars a day. The plant is now producing about 750 cars a day.

Two new wings and a new bay will be added, bringing the total manufacturing area to more than 1,070,000 square feet. Work was expected to begin this month.

Timken Budgets \$7,000,000 For 1956 Modernization

THE Timken Roller Bearing Co. has appropriated \$7,000,000 of its 1956 budget for an expansion and modernization program, and an additional \$5,000,000 for buying facilities to produce railroad bearings.

It plans to enlarge its Gambrinus, Ohio, tube mill, install two annealing furnaces, construct an oxygen plant, build a central warehouse at its Bucyrus plant and buy automatic screw machines and grinding equipment for all its plants.



SEASON'S GREETINGS TO ALL OUR MIDWAY FRIENDS!

Scents preserve us! A Car Deodorant is here...and in the St. Nick of Time!



AS ADVERTISED IN
LIFE

Air Deodorizers

FOR CAR, KITCHEN, HOME — everywhere...

- Pre-sold for your Profit-Protection in National Magazines
- Sells on Sight — and Smell
- Every Car Owner is a Repeat Customer
- Over 20,000,000 already sold

Guaranteed Sale!

**MAKE FULL
PROFIT**

Retails for only

29¢

MIDWAY CORPORATION • 3300 DENISON ST., BALTIMORE 16, MD.

World's Largest Manufacturers of Air Deodorizers



New officers of Automotive Trade Association of Virginia installed at the convention in Roanoke last month included (l. to r.): Harold E. Erwin of Fairfax, second vice-president; John C. Swanson of Danville, president; J. R. Chapman of Richmond, first vice-president, and W. O. Riley of Woodstock, secretary-treasurer. Paul C. Duckworth of Lynchburg was named third vice-president of the group. Charles B. McFee, Jr., who headquarters in Richmond, is the general manager.

Unethical Ads and "Captive" Wives Are Subjects for Virginia Dealers

UNETHICAL advertising, "captive" wives, good management practices and a profit-prophet panel were among the variety of topics discussed at the 12th annual convention of the Automotive Trade Association of Virginia at Roanoke last month.

Over 400 dealers heard NADA's President Frank Yarnall of Chicago condemn misleading advertising.

Unethical, misleading and downright false come-on gimmicks by some agencies have destroyed the public's confidence in automobile dealers, he indicated.

Yarnall further advised the Virginians that the vogue today is to sell price instead of product, with over-allowances becoming the most important part of a sales discussion.

The profit-prophet panel, an innovation which permitted the audience to fire questions at the panel of experts, featured addresses by Harry Kolb of Esso Standard Oil, Clark Moody of NADA and Alan G. Rude of Universal C.I.T. Credit Corp.

Virginia has 325,000 "captive" wives — women who are straddled because the husband drives the

one family car to work, Rude stated. Declaring that the potential automobile market in Virginia is increasing by 25,000 cars a year, he held that the suburban population is the key factor and such families are the prime targets for two-car sales talk.

Over 500 representatives of the automotive industry in Virginia registered and participated in the three-day meetings.

The association had the distinction of being the first organization in Virginia and in the nation to raise the official Jamestown celebration flag when the emblem was unfurled with appropriate ceremony at the annual banquet.

John Swanson of Danville, president-elect, presided over all sessions of the convention due to the illness of President William T. Robey of Buena Vista. Six days before the meeting Robey had to undergo an appendectomy which prevented his attending the sessions.

The following directors were elected for a two-year term:

P. Warren Spratley, Hampton; C. B. Mason, Portsmouth; J. R. Chapman, Richmond; A. M. Barlow, Petersburg; Raymond K. Ful-

ton, Wytheville; Joe L. Hill, Roanoke; R. E. Smith, Winchester; D. D. MacGregor, Charlottesville; Joseph A. Johnson, Abingdon; M. J. Logan, Fairfax.

Roanoke Warehouse Led By Morris of Georgia

A WAREHOUSE for automotive parts, said to be the only one of its kind between Baltimore and Atlanta, has been established in Roanoke, Va. The announcement was made by R. L. Brickey of Roanoke, a director of the new enterprise.

J. Robert Morris, former president of Southeastern Automotive Parts Warehouse in Atlanta and a native of Tifton, Ga., is manager.

Morris said the depot, Automotive Service Depot, Inc., has been set up exclusively as a service warehouse for wholesale automotive jobbers in Virginia, West Virginia, North and South Carolina, eastern Tennessee, eastern Kentucky and western Maryland.

Delta Dealers Recognize Solons, Name Officers

THE (Miss.) Delta Automobile Dealers Association honored legislators from 11 counties at a dinner last month.

Members and guests heard House Speaker Walter Sillers, Chairman Hilton Waits of the house appropriations committee, Highway Commissioner Felder Dearman, NADA Director L. Flowers Hamrick of Greenwood, and C. H. Hawkins of Kosciusko, president of the Mississippi Automobile Dealers Association, in brief talks.

W. D. Crump of Sumner was named president for the forthcoming term, Bob Redding, Cleveland, vice-president, and Ralph Holland, Indianola, secretary-treasurer.

Valentine Joins TADA

James P. "Jim" Valentine of Austin has joined the staff of Texas Automotive Dealers Association as a field representative. Valentine, who has a wide background in the automotive sales and management field, succeeded Robert E. Nordley, who resigned.

**ALL PARTS
IN ONE
PARCEL!**



**You never lose a minute
looking for lost parts!**

Now you can repair carburetors from start to finish and waste no time hunting lost or strayed parts. Rochester's new *sealed* carburetor repair kit keeps all parts intact until they're called for on the job. What's more, a handy new moisture-proof container protects fuel strainers and matched float valve needle and seat assemblies from dirt and damage. This new kit is another important reason why you can count on Rochester to bring you the latest advancements in products and services—first!

CARBURETORS BY ROCHESTER

ROCHESTER
PRODUCTS
DIVISION OF
GENERAL MOTORS
CORPORATION
ROCHESTER N.Y.



Hard Work Is Necessary to Combat Spurious Selling, Texan Declares

By F. M. GILLESPIE

President, Texas Automotive Dealers Association

THE major problems facing automobile dealers today stem from the fierce production contest in which the manufacturers are engaged.

In the face of the highest schedules in output the industry has ever seen and with a reluctance on the part of the buyers to increase their buying tempo, dealers who expect to continue in the business and maintain their positions as responsible citizens are going to have to work hard to counteract some of the spurious selling programs of recent years.

Superlatives in advertising copy have about run their course. Such copy now has a double backfire. Buyers have begun to discount the advertisements as unbelievable

and salesmen have been encouraged to hang around sales floors rather than making calls.

Extravagant advertising is going to be stopped because, sooner or later, dealers will realize that they are wasting their money. Perhaps then sound, logical copy will again return to its proper place in presenting to the buying public the automobile dealers' claim for their patronage.

Salesmen once more are going to have to go out to meet their prospects and create a desire for ownership. They are going to have to demonstrate the fine quality and performance that have been built into today's car. Manufacturers are superb in their field of designing and building automobiles.

No traffic headaches can be found in "Traffic City," a model which shows how major city congestion and parking problems can be solved. It's demonstrated here by Dwight B. Ferguson (right), vice-president of Universal C.I.T. Credit Corp. for the Richmond division, to Charles B. McFee, Jr., executive vice-president of the Automotive Trade Association of Virginia. Ferguson's company developed the model, in line with recommendations of Automotive Safety Foundation traffic engineers, to increase public interest in traffic modernization. The animated scale "city" illustrates underground and roof top parking, as well as parking structures; off-street deliveries and loading; underpasses, expressways, pedestrian ramps, bus bays and many other features.



The editors requested a statement from the author on problems facing franchised dealers today. The association of which he is president is one of the largest in the United States. His firm is Gillespie Motor Co. (Ford), San Antonio.

In the field of merchandising dealers have a wealth of experience, are in close touch with the buying public, have their past, present and future at stake and they should determine the methods they will follow.

Battery Charger Group Formed by Factories

THE objective of the recently organized Automotive Battery Charger Institute is to promote the best interests of users, distributors and manufacturers of battery chargers, according to Herman J. Lange, president.

At the organizational meeting held in Chicago earlier this year, the following were elected: Herman J. Lange, Marquette Mfg. Co., president; Kenneth Dawkins, Franklin Mfg. Co., vice-president, and Leonard O. Zick, Allen Electric and Equipment Co., secretary-treasurer.

Nash Elevates Stone

G. B. Stone, Jr., business management manager since 1953, has been named special assignment representative on the staff of Roy Abernethy, sales vice-president of Nash Motors. He joined Nash in 1945 in the Kansas City zone and later was named Oklahoma City zone manager.

(More News Briefs on page 108)

and our 1956 engineering story is just as beautiful

THE styling beauty of these 1956 General Motors cars speaks for itself. And in words you GM dealers—and—of course, your customers are quick to appreciate.

But in your delight at the superlative way our GM designers have come through for you—with such sales-convincing advances as the 4-door hardtop—don't overlook the equally sales-clinching contributions of our GM engineers. After all—they pioneered automatic transmissions.

So 1956 GM automatic transmissions are bound to be the most advanced on the market. Their work in high-compression engine development is well-known. And the 1956 high-compression V8's in these cars make powerful sales points. The same goes for 1956 General Motors Safety Power Steering, Power Brakes, air conditioning.

Yes—in 1956 Styling—and in 1956 Engineering—General Motors leads the way to even greater sales for you!



1956 Chevrolet Bel Air 4-Door Sports Sedan



1956 Pontiac Star Chief 4-Door Catalina



1956 Oldsmobile Ninety-Eight DeLuxe Holiday Sedan



1956 Buick Roadmaster 4-Door Riviera



1956 Cadillac Sedan de Ville

GENERAL MOTORS

leads the way to even greater sales for you!

CHEVROLET • PONTIAC • OLDSMOBILE • BUICK • CADILLAC • *All with Body by Fisher* • GMC TRUCK & COACH

Where do **YOUR CUSTOMERS** buy

Brake Fluid?

Every customer that rolls thru your station buys brake fluid someplace. Are you missing the boat on this profitable business?

Can YOU stop in time?



**INFERIOR
BRAKE FLUID
caused this wreck!**

WARNING

There are many inferior brake fluids on the market

It may save your life, or the lives of others to heed this warning issued by Better Business, Safety and Automotive groups.

"Inferior brake fluid in even a mechanically sound braking system may impair the whole system and make your brakes ineffective in an emergency."

Can YOU stop in time?

● Investigations of many fatal accidents have proven that a high percentage of these accidents were caused by criminally unsafe brake fluids. The situation is so serious that two states, Minnesota and New Jersey, have outlawed inferior brake fluids and other states will follow shortly.

Car manufacturers use and recommend to their owners that they make sure the brake fluid they buy meets SAE specifications R71 or R72.

Here's how you can be *safe*

Don't let any dealer or mechanic fool you. You have seen the can and the label. Unless the label states that the brake fluid meets or exceeds SAE specifications R71 or R72... *think off fast.* Don't take chances... it may mean your life.

**BOWES
SEAL FAST**

BRAKE FLUID IS *safe*
When your service station uses Bowes Brake Fluid you may be sure he is more interested in YOUR welfare than the very few pennies difference between safe and unsafe brake fluid.

BOWES "SEAL FAST" CORP., INDIANAPOLIS 7, INDIANA
HAMILTON, ONTARIO, CANADA • LONDON, ENGLAND
BOWES PACIFIC CORPORATION, RIVERSIDE, CALIFORNIA

Ads like this in

The Saturday Evening
POST

will help you get
your share of the big
Brake Fluid Volume

IF you identify
yourself as a
Bowes "Seal Fast" Dealer

**YOU can CASH IN
on BOWES
Advertising**

Ask your
BOWES MAN
or write us direct

Car Owners are getting BRAKE FLUID Conscious

Two states have "outlawed" gyp Brake Fluids. Other states will follow. Many Motor Clubs are warning members that there are many inferior, dangerous brake fluids. The American Automobile Association and other safety groups have put out special bulletins warning the motorist to "watch his step" on brake fluids. Car manufacturers tell owners to make sure the brake fluid they buy is SAFE.

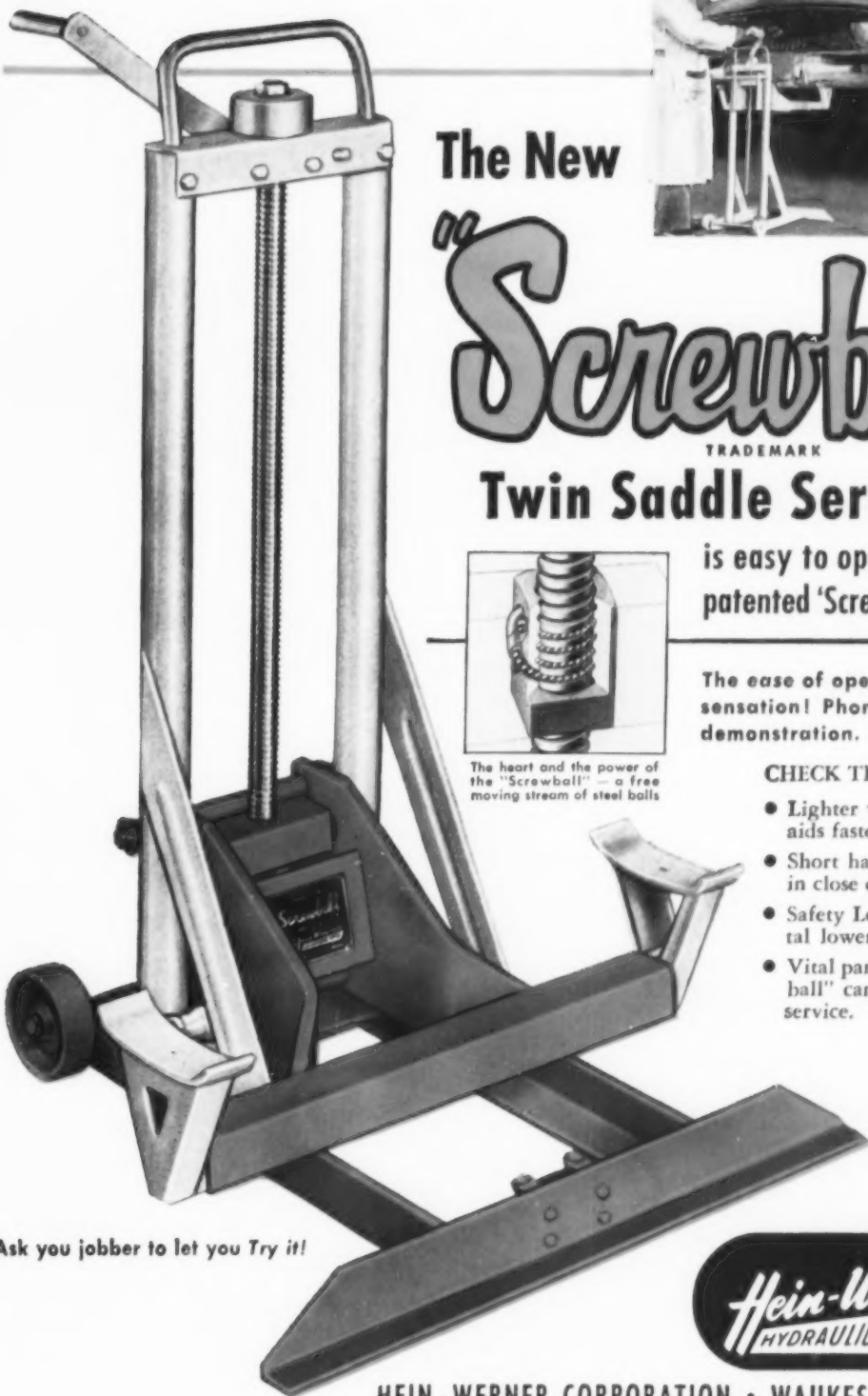
Tie-in with BOWES and you'll sell more brake fluid

Our advertising in the POST and other leading magazines is educating the motorist to look for BOWES Dealers where he will find SAFE brake fluid.

Your Bowes Man will furnish identifying materials, folders, etc., which will make our advertising YOUR advertising.

BOWES "SEAL FAST" CORPORATION, INDIANAPOLIS 7, INDIANA
HAMILTON, ONTARIO, CANADA • LONDON, ENGLAND
BOWES PACIFIC CORP., RIVERSIDE, CALIFORNIA

A demonstration is a sensation!



Ask your jobber to let you Try it!



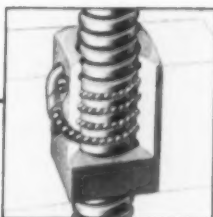
The New

"Screwball"

TRADEMARK

Twin Saddle Service Jack

is easy to operate because of patented 'Screwball' power unit



The heart and the power of the "Screwball" — a free moving stream of steel balls

The ease of operation IS an amazing sensation! Phone your jobber for a demonstration.

CHECK THESE ADVANTAGES:

- Lighter weight (only 117 lbs.) aids faster positioning.
- Short handle permits operation in close quarters.
- Safety Lock to prevent accidental lowering.
- Vital parts are plated so "Screwball" can be used for washrack service.

1½ tons capacity

\$68⁷⁵

Suggested Dealer Net



HEIN-WERNER CORPORATION • WAUKESHA, WISCONSIN

DELCO DRY CHARGE BATTERIES EASIER TO STOCK



... HERE'S DELCO'S NEW CONVENIENT ELECTROLYTE PACKAGE

ZIP off the top of the sturdy fiber-board container, with the built-in pull string.

CLIP off the corner of the acidproof polyethylene bag that's attached to the container.

POUR easily from this disposable container, which comes in two sizes to meet every battery need.

★EASIER TO SELL

**DELCO DRY CHARGE MEANS THE BATTERY CAN
BE STORED INDEFINITELY AND STILL GIVE
FACTORY-FRESH POWER INSTANTLY**

**DELCO'S FOUR-YEAR GUARANTEE ON
EXTRA-DUTY BATTERIES IS EFFECTIVE REGARDLESS
OF MILEAGE IN NORMAL PASSENGER CAR USE**

These are two important points that take the worry and work out of stocking and selling batteries. Now you can store odd-size batteries as well as popular sizes, and no matter how long you keep them, they can't get old before they're sold! You merely add electrolyte and they're rarin' to go *without any electrical charge.*

With Delco's new four-year guarantee, battery sales come easier. Your customers know this longer guarantee on

Extra-Duty batteries is backed by both Delco and General Motors. It's a guarantee they respect... a guarantee that really means something.

In addition to Delco's Extra-Duty line of wet and dry charge batteries, Delco has an Original Equipment line, a Tractor line and an Economy line. There's a Delco made to fit every purse and purpose—you can't miss a battery sale now!

*Tune in... ON TV... Spectacular "Wide Wide World," NBC Network.
ON RADIO... Lowell Thomas Newscast on the CBS Network.
See your local listings for time and station.*



General Motors leads the way

STARTING WITH DELCO BATTERIES

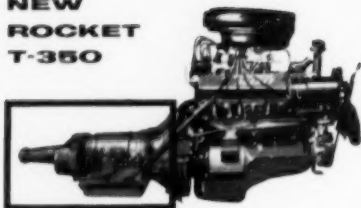


THE CAR WITH THE

Sales Personality!



NEW
ROCKET
T-350



TEAMED WITH NEW
Jetaway HYDRA-MATIC
Powerfully Smooth...
Powerfully Safe!

**Spectacular Announcement
Gets Oldsmobile Dealers
Off to a Flying Start!**

Off and rocketing to another record sales year! It's Oldsmobile for '56—the car everybody's going for. Again Oldsmobile has anticipated the style trend... with new Starfire styling. And for action there's the new Rocket T-350 Engine... teamed with revolutionary Jetaway Hydra-Matic*, the great new name in transmissions. The signs are clear... this is a year for "the car with the power personality!" Now, more than ever before... it's smart to be with Olds!

*Standard on Ninety-Eight models; optional at extra cost on Super 88 models.

OLDSMOBILE

DIVISION OF GENERAL MOTORS CORPORATION • LANSING, MICHIGAN



They're really going for this new **SIoux** **IMPACT WRENCH**



In industry, in the aircraft and automotive fields, wherever nuts must be run down and tightened or loosened and removed, Sioux Impact Wrenches are slicing minutes to seconds.

MODEL NO. 325 — \$ 99.75

MODEL NO. 330 — \$127.50

SIoux's

got the exclusive reverse cap switch lock that prevents reversing with the switch on and eliminates burning the commutator brushes and switch contacts.

**SIoux's
GOT THE
POWER!**

**SIoux's
GOT THE
DEPENDABILITY!**

**SIoux's
GOT THE
PRICE!**



USE SIoux ALL THE WAY THROUGH
STANDARD THE WORLD OVER...
ALBERTSON & CO., INC.

SIoux CITY, IOWA, U.S.A.

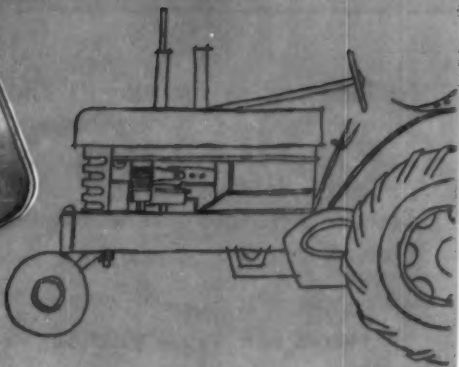
ELECTRIC IMPACT WRENCHES* GRINDERS* FLEXIBLE SHAFTS* POLISHERS* DRILLS
HAND SAWS* SANDERS* VALVE FACE GRINDING MACHINES* ABRASIVE DISCS



First and Foremost

FOR HIGH COMPRESSION ENGINES

FITZGERALD GASKETS

- 
- Performance proven . . . the best answer to the need for stronger, tougher gaskets for modern high compression engines.
 - For replacement trade and original equipment, FITZGERALD Gaskets have stood the test of time since 1906.
 - Sold throughout the world.
 - The name "FITZGERALD" stamped on every gasket is your guarantee of satisfaction.

ORRAGE RETAINERS • CORK GASKETS • FITZ-RITE TREATED FIBER GASKETS
FOR OIL, GASOLINE AND WATER CONNECTIONS
COMPLETE SETS FOR MOTOR REBUILDERS



FITZGERALD
Gaskets
SINCE 1906

THE FITZGERALD MANUFACTURING COMPANY
Torrington, Connecticut
BRANCHES AND WAREHOUSES
LOS ANGELES, CALIF.; CHICAGO, ILL.
CANADIAN FITZGERALD LTD., TORONTO, CANADA



Now underway



EXCLUSIVE:
 Purolator—used by 9 out
 of 10 drivers in NASCAR
 (National Association for
 Stock Car Auto Racing)
 Grand Championship Events!

A great new Purolator Program

**that S-P-E-L-L-S greater-than-
 ever Purolator Profits!**

Every dealer will "get" it! Completely understandable, fully believable—the biggest, most convincing selling idea ever used to back the sale of oil filters!

1. Every car in a NASCAR Event is a stock car . . . a car like the one you drive . . . a car like the cars thousands of your dealers drive.
2. Every Purolator Filter used in cars in NASCAR Events is regular stock—the Purolator all dealers sell.
3. Every dealer—every motorist knows the strain hour-after-hour high-speed NASCAR driving in biting dust and dirt puts on cars and equipment.
4. Now—thanks to Purolator's NASCAR tie-up—every car owner understands the tremendous superiority of Purolator Micronic Oil Filters . . . understands it in terms of his own car.

SELL MORE DEALERS MORE!

Purolator is presenting this powerful NASCAR story of Purolator leadership in powerful human interest advertising in national magazines and newspapers . . . with exclusive on-the-spot merchandising and promotion.

Use this great selling idea to sell more dealers more Purolator Filters.

Remember: Purolator is first and finest . . . engineered to fit every car on the road. Purolator meets every dealer's needs 100%.

Remember: Every Purolator sold means the sale of an extra quart of oil . . . extra profits for every dealer.

Write, wire or phone for information.

*Purolator and "Micronic," Reg. U.S. Pat. Off.

PUROLATOR PRODUCTS, INC., Rahway, New Jersey and Toronto, Ontario, Canada

Purolator

. . . America's No 1 OIL FILTER



PACKARD NOW FEATURES CHAMPION SPARK PLUGS 100%



Truly fine-car
performance demands
Champion Spark Plugs

CHAMPION

Every beautiful new '56 Packard goes to its proud owner factory-equipped with Champions for longest-lived new-engine performance



At Packard's new proving grounds near Utica, Michigan, Packard engineers conducted their own tests to prove that Champions worked best in the new Packard V-8 engines that go up to 310 horsepower. Champion is proud of this result and proud of Packard's wholehearted acceptance of Champion Spark Plugs.

The creative engineers who offered American car buyers the first production-made car with Torsion-Level Ride now depend on Champion Spark Plugs 100% for peak engine performance in every magnificent new Packard they build.

The fact that Packard-Clipper Division of Studebaker-Packard Corporation specifies Champions in all models is added proof that Champions—and only Champions—help provide the power, the performance, the efficiency and the stamina that leading automotive men demand in today's high-powered, high-

performing engines. Every owner of a luxurious new Packard now gets the full benefit of Champion five-ribbed, full-firing spark plugs. Every owner of a new Packard now benefits from reduced spark plug fouling in prolonged low-speed driving and the wider high-performance range Champions deliver.

Packard's choice of Champion Spark Plugs "across the board" means two "plus" benefits for you: it gives you a broader replacement-business potential, and still another factual talking-point to boost your Champion sales volume.

Sincerely,
Jim L

SPARK PLUG COMPANY • TOLEDO 1, OHIO

to the Automotive Trade

*A
Very Merry Christmas
and Happy New Year*



THE VMC SYSTEM members in the South:

Automotive Armature Service
VMC ▼ 150
Bessemer, Alabama

Automotive Armature Works
VMC ▼ 126
Atlanta, Georgia

Auto Equipment Company
VMC ▼ 128
Washington, D. C.

Automotive Electric & Parts Co.
VMC ▼ 169
Baltimore, Maryland

Automotive Rebuilders, Inc.
VMC ▼ 137
Richmond, Virginia

Capco-Delux Generator Co.
VMC ▼ 140
Covington, Kentucky

Carburetor Electric Co.
VMC ▼ 131
Montgomery, Alabama

Cox Armature Works
VMC ▼ 177
Greenville, N. C.

Delta Unit Rebuilders
VMC ▼ 175
Williamston, S. C.

Dykes Auto Electric
VMC ▼ 130
Tampa, Florida

Generator, Exchange
VMC ▼ 173
El Paso, Texas

Jobber Supply Service
VMC ▼ 121
Columbus, Ga.

Kimco Auto Products
VMC ▼ 133
Memphis, Tenn.

M & M Winding Service
VMC ▼ 171
Lebanon, Tenn.

Mercury Armature Co.
VMC ▼ 157
Newport News, Va.

Metro Electric Co.
VMC ▼ 154
Amarillo, Texas

Moore's Generator Exchange
VMC ▼ 118
Albuquerque, New Mexico

Pure's Automotive Service
VMC ▼ 158
Memphis, Tennessee

Sanders Auto Electric
VMC ▼ 124
Augusta, Georgia

Sunshine Armature Works
VMC ▼ 166
DeLand, Florida

Unit Parts Company
VMC ▼ 151
Oklahoma City, Oklahoma

Vitalic Battery Co.
VMC ▼ 152
Dallas, Texas

Weathersbee Electric Co.
VMC ▼ 142
San Angelo, Texas

The White Armature Co.
VMC ▼ 174
Sumter, S. C.

Other members located to provide Nation-wide service

DECEMBER, 1955



Three Steps to Big Volume

By **MANDELL J. OURISMAN**
Vice-President, Ourisman Chevrolet, Inc.
Washington, D. C.

Our parts and labor went from \$79,000 to \$104,000 a month. It was no accident, but came from a program.

IN AUGUST, 1955, our service volume established a new high record. We hit \$52,000 for paid labor volume and \$52,000 for total parts sales.

We glanced back over our figures for '54: Paid labor for August last year stood at \$39,000, parts volume at \$40,000.

Service volume had gained 33%!

This was by no means an accident. When we set out to increase volume, we took an analytical look at problems, and then asked ourselves what we could do about them.

1. The greatest problem in increasing service volume in any shop is space. A shop should be easy to drive into. Cars should be moved along the lanes as rapidly as possible. Nothing so discourages a driver as approaching a service lane that is jam-packed with cars. Without second thought

he is off elsewhere.

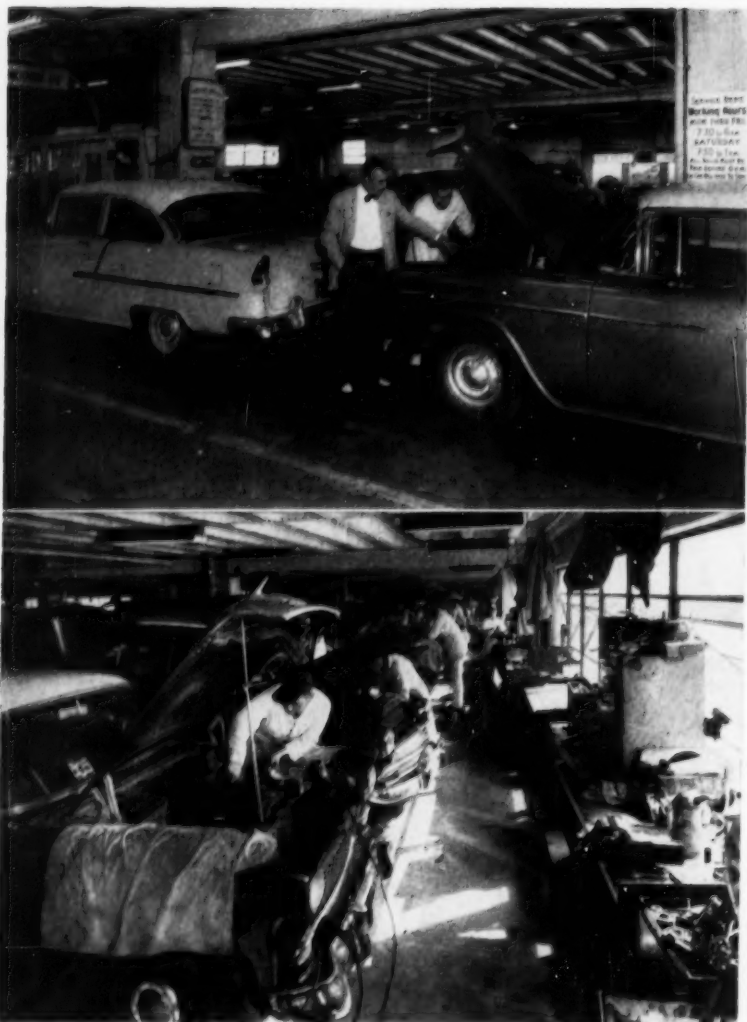
We met this by increasing our car jockeys from eight to 14 to get cars moving along as fast as possible. Entrance to service lanes has to be kept wide open.

2. We looked around our shop to see what we could do about increasing productive space. Seizing upon storage space that took care of cars waiting to be repaired, we converted a six-car area into a glass shop, radiator shop and frame-straightening stall.

Installing a new frame-straightening machine, we had added space for this service. We gave to each shop about the area of two stalls. We had always sublet radiator and glass repairs because we thought we lacked space. Now we had acquired profit-producing departments within our own building and had eliminated subletting.

3. Our third avenue of approach to greater service volume was increasing the number of trained mechanics, body repairmen and painters. Stepping up our advertising program by newspaper and television by about 5%, we saw the need for obtaining highly skilled mechanics who could handle our growing volume with speed and efficiency.

We hired mechanics on a 30-day trial period, weeded out the poorer ones and retained those of highest caliber that met our standards of performance. Handling 250 cars a day in our shop, and doing on an average of \$50,000 a month in paid labor, we cannot tolerate the mechanic with excessive comebacks. Efficiency and high production have to go hand in hand. We put on a drive to reduce comebacks and succeeded in cutting them down from 26 a day to less than ten.



Cars should move along lanes as swiftly as possible. Ourisman Chevrolet in Washington, D. C., increased the number of its car jockeys. Below: Management of this shop maintains that the best mechanics available are basic to increasing volume. The top men earn \$125 weekly on an average.

We try to give our mechanics every aid for turning out the best job possible in the shortest time. A special toolroom of company-owned tools makes available to a mechanic the latest equipment.

Each of our three shops (mechanical, body and paint) has its own foreman who is on a straight salary.

Our seven service salesmen get a guaranteed minimum weekly of \$85 plus a 4% commission on all labor they sell over a minimum of \$4,000 a month. They average \$105 a week. This commission applies to new-car 1000-mile inspections as well. The service salesman who is paid to be equally attentive to the warranty labor customer and regular customer will not ignore the new-car customer. His courteous attention will pay off many times over in good-will, repeat business and future volume.

The addition of a pneumatic tube system throughout our five-story operation speeds the inter-departmental routing of repair orders over our 150,000 square feet of shop space.

Increased service volume is there for the taking by any firm.

Comebacks here, as in other shops, are redone by the same mechanic on his time at no charge to the customer.

We have a unionized shop, paying our mechanics 50% of flat rate, which is \$4.50 an hour to the customer, and guaranteeing our shop personnel a \$75 weekly minimum. Our top mechanic earns \$125 a week, our average mechanic \$110. Similarly, our bodymen and painters get 50% of flat rate, with a \$75 weekly minimum, averaging \$150 a week. Mechanics reconditioning used cars work on the same plan.

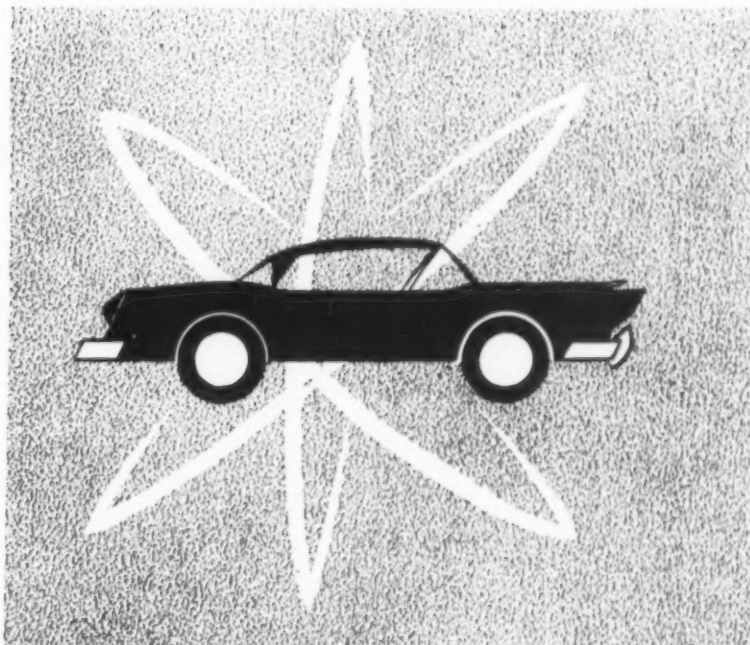
I cannot stress strongly enough the importance of employing the best mechanical labor available in any drive for increasing volume. Quality personnel may be more costly but are far cheaper in the long run and more profitable ultimately for the company.



The Outlook for Atomic Cars

The nuclear "bugs" are big ones. Maybe you'd be safe in planning on seeing a less radical design for a few years.

The author, formerly an assistant editor of SOUTHERN AUTOMOTIVE JOURNAL, is now a resident of New Mexico, a state that has played a leading role in atomic development. The first atomic bomb was exploded at White Sands in July, 1945. It was designed and built at Los Alamos Scientific Laboratory, which several years later produced the first thermonuclear bomb. The laboratory is also active in reactor research. Other atomic-age activities in the state include special military research at Albuquerque and uranium mining in the northwestern section.



By M. M. WILCOX

THE Nautilus is a success and the atom-powered submarine seems well on the way to becoming a "production" item.

Nuclear reactors for airplanes are mentioned on the front pages of newspapers, as well as in the comic strips.

Will automobiles also be powered by nuclear fuels? And how soon will the first atomic cars appear?

There are no easy answers to these questions. Some people predict that nuclear power will continue its progression from bulky and costly reactors toward units that would be suitable for the family sedan. But few people will even guess when and how the Nuclear New-Flite will reach the American highway.

A look at the history of nuclear power shows how far it has developed within a few years—and how much still has to be learned about its possibilities.

Just 13 years ago this month,

on December 2, 1942, the first self-sustaining chain reaction was achieved by Enrico Fermi and his fellow workers at Chicago. A chain reaction is what makes a nuclear reactor "run." A neutron hits an atom of uranium or some other fissionable material. The atom breaks into two pieces, releasing energy and also releasing a few neutrons that can hit other atoms and cause them to fly apart.

But some of these neutrons do not strike atoms in such a way as to cause fission; they may attach themselves to an atom without causing fission or they may move away from the uranium into the air or other material surrounding the uranium. The principle of a nuclear reactor is simple, but it's not easy to get the "timing" and "compression" adjusted so it won't lose too many neutrons and "stall."

When Fermi started work on the first successful reactor, he planned to use 12,400 pounds of uranium, though the chain reaction actually began before quite all of it was in place. When details of the Army Package Power Reactor, for use at remote stations, were announced a few months ago, it was stated that approximately 55 pounds of

enriched uranium would be used.

The Fermi reactor, including the material used to make the neutrons work most efficiently and the material to shield personnel from radiation, would have filled a sizable room. Today at Los Alamos Scientific Laboratory a chain reaction can be produced with a bare uranium sphere that is smaller than the air cleaner on some current automobiles.

But before anybody leaps to the conclusion that atomic cars could be on the road next year if Detroit would just quit dragging its feet, a closer look at these optimistic facts is necessary. The uranium sphere at Los Alamos is no more capable of running a nuclear-powered car than a match tossed into a cup of gasoline is capable of running a conventional car. And the fuel planned for the Army electric power plant bears somewhat the same relation to the fuel in the Fermi reactor as 100 octane does to crude just out of the well.

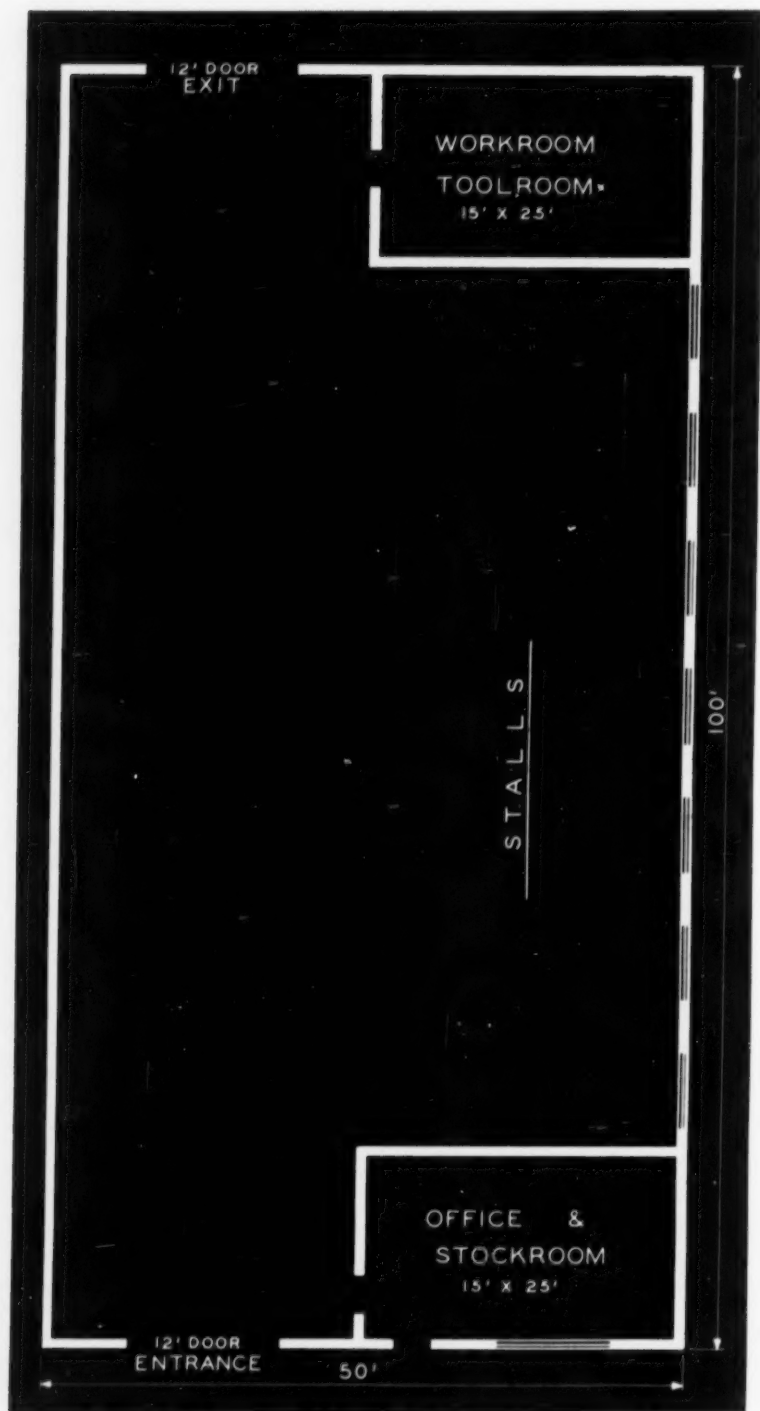
There are a number of problems to be solved before nuclear-powered cars will be feasible. Some of them are familiar to any automotive mechanic and some are en-

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A Simplified Five-Stall Shop

Fourth in a series on efficient planning of garage buildings.

By **HENRY A. POWELL**
Owner, Powell's Garage
Romney, W. Va.



I INCREASED my repair volume by at least 50% when I acquired the kind of shop that permitted easy entrance and exit, a few more better-lit workstalls and some departmentization that eliminated the distractions of general repairs all going on in the same area.

My old place had all of these shortcomings and more. There was congestion, stalls were difficult to get to, the place was small and more work was brought in than I could reasonably take on. Besides, I was renting and longed to get a permanent place I could call my own.

I had an idea of what I wanted. In any case, I believed I would be able to identify a suitable place immediately, if I came across one.

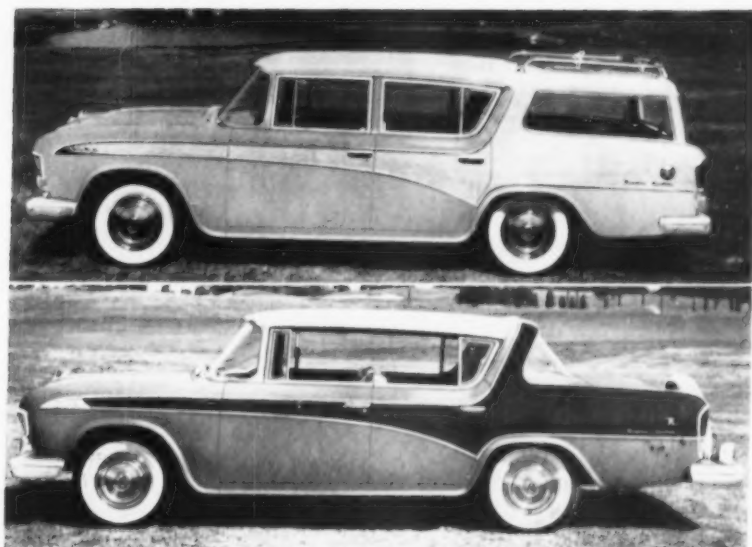
In our new concrete block building 100' long and 50' wide removed from the busy main street, we have a 12' by 12' doorway at either end of the building connected by a through driveway 100' long. At the right we have five workstalls permitting us to handle five jobs at a time. In the driveway itself we handle truck repairs, sometimes as many as four or five trucks on a busy day. We have a 12' ceiling clearance for 80' of the shop, reduced by one-foot by steampipes for the remaining area.

An office and parts department 15' by 25' is situated on the street side of the building and a tool and workroom 15' by 25' at the rear of the building.

Seven windows, each 68" square, admit plenty of natural light to the workbenches lined up against the wall of the workstalls. Localized fluorescent lighting at the workbenches eliminates eyestrain in precision work. General overall incandescent light gives illumination to our driveway and throughout the shop when needed.

Steam heat through four blowers in the shop, and a blower in the office and workroom, keeps us comfortable during cold months.

We especially appreciate the
(Continued on page 78)



Top: The more spacious interior of the Cross Country station wagon provides 80 cubic feet of cargo space in addition to increased passenger room. The rear window lowers into the single tailgate by means of a combination crank and lock. Above: Roomier inside, the redesigned and restyled Rambler is more compact than before in outside dimensions. Trunk space is increased 25%. Window area has been increased by 30%.

The More Compact But Larger Rambler

COMpletely new from the ground up, the 1956 Rambler features sweeping changes in design, styling and engineering. Several stand out:

The Rambler is even more compact in outside dimensions, but much larger inside;

New distinction of appearance—lower, narrower, racier;

An entirely new overhead valve engine provides increased power and performance, but Rambler emphasis on fuel economy is maintained;

The new single-unit body design, with "three-dimensional" frame, increases built-in, all-around passenger safety; provides tremendous new visibility, and is the first to make basic structural provision for new developments, such as air conditioning;

A new ride with deep-coil spring suspension on all four wheels; wider tread; new torque-tube drive; sharply increased braking area;

New models, including the first

Rambler 4-door hardtop convertible sedan, and the industry's first 4-door hardtop convertible station wagon.

President George Romney described the Rambler as a \$21,000,000 investment.

The 1956 Rambler retains the compactness of the 108" wheelbase, but is redesigned for maximum utilization of "useful space." Refined body lines and fresh styling approach give an impression of increased exterior size, but the car has actually been lowered 1½" and exterior width reduced two inches. Over-all length is two inches less on several models but has been moderately increased on others for new styling and more trunk space. The Rambler still is more than a foot and a half shorter than the average American-made car.

Rated at 120hp, the engine has a displacement of 195.6 cubic inches and a compression ratio of 7.47 to 1.

The '56 Rambler has a 12-volt

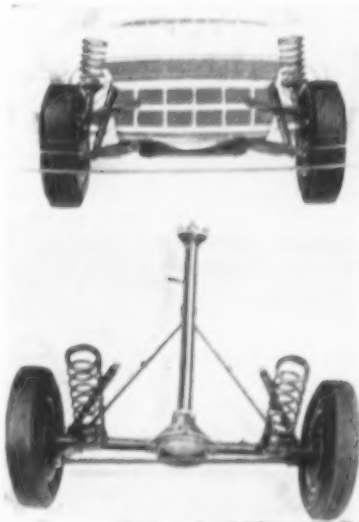
electrical system for quicker cold-weather starting, higher generator output and increased power for operation of the lights and accessories.

Added safety is provided by an increase of almost 50% in effective braking area. Brakes and clutch pedals are of the suspended type. The brake master cylinder, located on the firewall, is readily accessible. Power brakes are standard equipment on all custom models, and are optional at extra cost on all other models. The power brake system is the "Treadle-Vac" type, permitting 25% faster braking with 40% less effort. Power steering, of the direct linkage type, is optional for the first time on Rambler models.

Economy of the Rambler's powerplant is due to highly efficient, wedge-shaped combustion chambers combined with an overhead valve system, iso-thermal six port intake manifold and downdraft carburetion.

It has aluminum pistons with four rings, forged four-bearing crankshaft, high-lift camshaft, full length water jackets, full-pressure lubrication system and external sweep-type exhaust manifold.

Below: Improved riding qualities are claimed by using deep coil springs on all four wheels and the addition of a front suspension cross-member mounted in rubber to the body sills. Lower control arms are mounted to the cross-member. Front tread is 3" wider and rear is 5" wider. Bottom: Among the many mechanical improvements is a torque tube drive, a completely enclosed unit with no moving parts exposed. It makes possible the use of rear coil springs for a smoother ride.

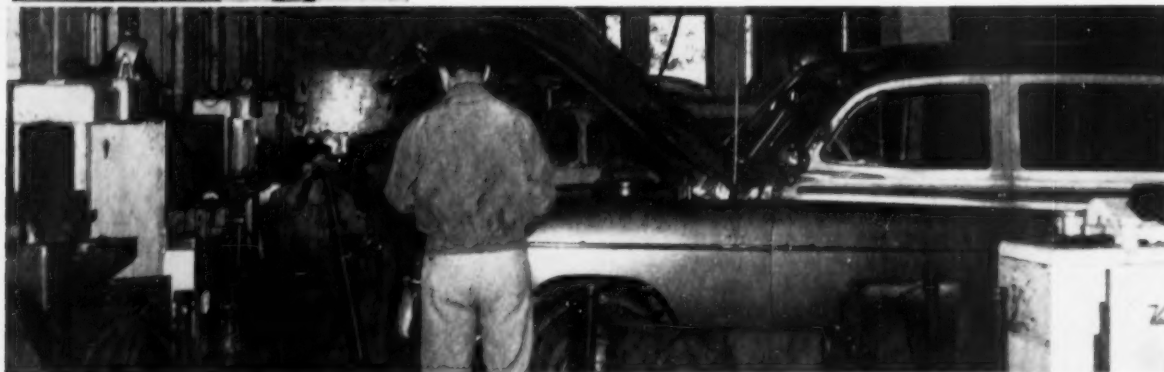




We Used Incentives to Prod the Gang

By **CARL F. CATLIN**

Service Manager, Anthony Abraham Chevrolet Corp.
Silver Spring, Md.



Top: a new-car customer gets prompt attention ahead of other service customers. Above: The incentive

pay plan converted this shop into one in which every employee gives his best — and gets bigger pay.

AN INCENTIVE pay plan can convert a shop from average to tops, from men working below capacity to high-producing, enthusiastic and energetic personnel.

Relating rewards to the quality and quantity of production puts a mechanic on his mettle. The attitude of management toward its personnel is even reflected in customer relations. The recognition of quality workmanship and rewarding of effort through high earnings cuts down comebacks as it makes for happier, more satisfied personnel. It builds up customer confidence and a steady expanding volume.

That has been our experience over the last five months. When we came in here, we found a good, modern well-equipped shop, yet a more or less loosely-knit organization, with an unfulfilled shop potential that we attributed to the lack of incentive and proper direction. Mechanics were not putting forth their maximum, and comebacks were causing the operation to lose ground.

Within five months an incentive plan for our 36 mechanics stepped up shop volume by 20% on passenger cars and 75% on com-

mercial accounts. New-car sales jumped by 500%, swamping our get-ready new-car department. This led to the decision to separate get-ready from the customer labor shop, a move that proved correct.

It has paid off in improved customer relations and a steadily growing post-warranty labor sales volume. Adding a night shift of six mechanics and shop foreman has helped absorb the increased load.

We pay our mechanics 50-50 of flat rate. No one is on straight salary. Working a 5½-day week, our top mechanics earn \$165 a week; front-end mechanic, \$175 a week, with body men and painters averaging \$150 a week or over.

We put service salesmen on straight salary plus a commission on customer labor sales, and on accessories sold on customer repair orders. The two service salesmen are also on a bonus plan that brings them each \$50 a month when paid labor is in excess of \$10,000; they are also given a 10% bonus on all accessory sales, and a \$25 bonus each when accessory sales exceed \$1,500 a month. Service salesmen get no credit on warranty labor.

Our four mechanics on the day staff and six mechanics at night in

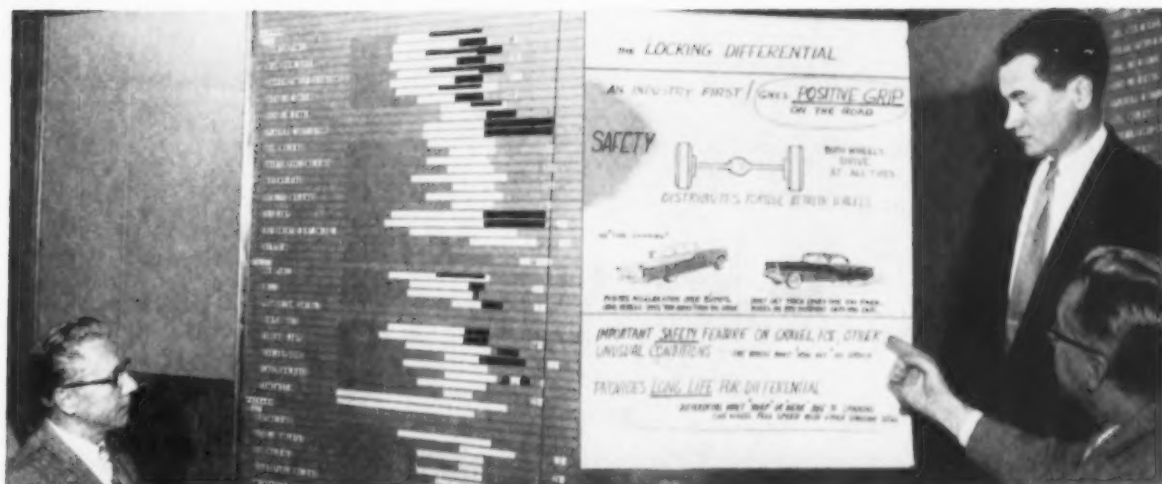
the get-ready shop earn on a par with mechanics in the customer labor shop. Our inspector in the get-ready shop, who goes right down the checklist to make sure every item has been properly serviced, is on a straight salary, and he too earns as well as our customer labor mechanics.

Our body shop foreman is on straight salary and an incentive, as is our outside estimator. Our body shop manager earns \$500 a month plus an incentive of 2% of customer labor over \$2,000 a month, 3% over \$6,000. Our outside estimator earns \$400 a month and works on a similar incentive. Earnings of the body shop manager come to \$600 a month, estimator approximately \$500 a month.

I think the real test of our accomplishment lies in the reduction of comebacks, in the reestablishment of a reputation for topnotch work in the community.

Customers now bring their post-warranty work back to us, because they know we put our new-car customers ahead of everyone else. Their satisfaction with our service will mean future new-car and repair volume to us. We saw the

(Continued on page 56)



Roger E. Bremer, Studebaker-Packard's vice-president in charge of product planning, studies a chart showing the progress toward developing many varied ideas.

Here he explains the product planning background on the industry's first non-slip differential to Richard Stout, Packard-Clipper product planning coordinator.

Less Human Element, More Safety!

HISTORY will record 1956 as the year marking the beginning of the industry's most important engineering era, according to Roger E. Bremer, vice-president in charge of product planning for Studebaker-Packard Corp.

"This is the year," says Bremer, "when the industry will establish the foundation for the ultimate in electronic push-button motoring to eliminate the human element in automobile operation. As we eliminate the margin for human error, we will come closer to the day of almost complete safety on the highways of America."

Bremer points out that even as Packard and Clipper dealers are showing new cars which offer the push-button controls, the reaching and the searching goes on for the products of the future — the motor car of next year and the car for ten years hence.

Playing an active role in the search for the ultimate in push-button motor car operations will be the newest major function in automobile company operations — product planning. It might be said that automobiles have always been planned, but a specific, organized product planning department at the corporate level, such as functions at Studebaker-Packard, is a newer development.

A factory executive tells how product planning is aiming at fool-proof cars of the future.

In effect, product planning at Studebaker-Packard adds a third dimension to the corporation's engineering and manufacturing programs. Without being an expert in any of those categories, it gives coordinated momentum to the total effort.

Bremer says the electronic push-button driving system introduced on 1956 Packard cars is a dramatic element in the long-range work of the corporation's product planning department. It is basically an engineering achievement, but product planning helped seek out the idea, analyzed its long-range potential, made recommendations to the Packard product committee, and following the decision to go ahead, helped plan the system into the manufactured car for 1956.

Unencumbered by having to be tied to immediate day-to-day problems, the product planning department at Studebaker-Packard, Bremer explains, largely devotes itself to products of the future.

Bremer points out that Studebaker-Packard product planning department charts have entries a full decade in the future. Many

verge on the still unknown. However, all entries represent concepts that will materialize into revolutionary innovations in motor-car safety, comfort, power and luxury — innovations of consequence of which few people now even dream.

The function of product planning is to look ahead and see what features and improvements are desirable, and then consider the fastest and most efficient way to get them designed into the product on the production line.

Bremer says that the product planning department goes through and considers thousands of proposed new devices and ideas each year, sifting out those which are thought to have significant potential and fitting them into long-range plans. No other group, concentrating on everyday problems, could or should be expected to have the patience to exercise this task.

Through the product planning function, the company is able to utilize its size as a source of strength. There are no product inhibitions. Ideas originating outside of the company get as serious study as those which originate from within.

The features selected for fur-

(Continued on page 72)



This service station has bought its fourth washing machine. Customers for other services have resulted from using this modern shop device.

Car-Washing Machine Helps Him Clean Up

I RECENTLY told a neighboring gas station operator that I was putting in my fourth washing machine, replacing one that had worn out over the years. He looked at me quizzically. He had given up washing cars some time back as unprofitable.

I could see that he would have liked saying, "Are you nuts? Where's the profit in washing cars?" But I smiled. I know better.

It's true that I'm in the fortunate position of having a heated building and hot water, an essential to car-washing volume in the wintertime. That's when my car-washing volume rises to \$1,200 a month. Yet even during the hot weather we do \$800 a month.

But that volume did not come of itself; it is volume we aggressively and conscientiously built up over the years through good management, well supervised and contented personnel, and first-rate modern equipment. Why? Because car washing pays off handsomely when it is handled properly.

I would like to say this to the many dealers and gas stations and independents who shrug off car washing as an unprofitable nuisance:

I would still wash cars even if I broke even.

Car washing makes potential customers for gasoline, lubrication, oil changes and other car services. It is a wonderful traffic puller.

We talk up car washes in the driveway. When our attendants spot a car in need of a wash job, they appeal to the car owner's pride by admiring his car and suggesting a wash. Then they point out our good facilities, speed and efficiency. Our price is \$1.25 for black-walled tires, \$1.50 for white walls. About three out of ten approached in this manner take the time to have a wash job done on the spot.

I keep alert to steady gasoline customers who have never tried a wash with us. We offer such customers a free trial wash. During weekdays when we are not busy, we do two to five free

—By—
THOMAS A. MURPHY
Owner, Murphy's Esso Servicenter
Washington, D. C.

washes a day. You'd be surprised how many steady customers have developed from these gift washes, how many sales and good-will. Only the other day a gas customer who got a free car wash asked us to go ahead on a lubrication and oil change.

If a customer happens to spot a dust streak after a car wash, we apologize and say, "Take it for free. The wash is on the house. You caught us that time." That, too, has brought customers back for steady business.

Weekends our three wash stalls are working at full capacity from 8 a.m. to 10 p.m. and on Sundays from 8 a.m. to 6:30 p.m. With two washboys to a stall, we employ six washboys Saturdays and Sundays, two full-timers during the week.

Good, modern equipment raises the morale of employees. Automatic equipment in which the washboy can set the time cycle switch and have the traveling arch move automatically forward, spraying the car with water and then on its return with detergent, eliminates the manual effort of pushing an arch along tracks.

Our wash personnel do not get wet under an automatic. Nor do they lose time through forgetting to trip the valve that fills the water tank on other equipment. Past experience with bucket and hose, or machines that shot out too abundant a spray that got them wet, often turned good wash personnel away. They caught colds. Good equipment keeps washboys healthy, happy and turning out efficient jobs speedily. I usually stick around when they rag down a car, inviting the customer to stand by, for he appreciates seeing the boys in lively motion over his car.

Our automatic washer is economical, too. It conserves water. But more important, it saves precious space. It is suspended from the ceiling over the grease pit, so that weekdays when we do not need a third wash stall in operation, it is out of the way, permitting us to drive cars onto the grease rack.

Before we got the automatic washer, we used to lose 10 to 15
(Continued on page 56)

Garagemen's Stake in the Future

A manufacturer analyzes the repair-shop business and pictures what's ahead for operators who take the ball.

I SHOULD like to mention perhaps an over-simplified list of the different major elements which make up your business — to each of which I am sure you give as much attention as you can:

1.—(And so frequently first neglected!) A simple cost-accounting system with proper expense classification and expense distribution. This is very essential if you are to be able to analyze your own costs, keep close check on them and to set your own rates so you can take full advantage of your own efficiency, management and knowledge. You may be surprised how often, by running a good cost-accounting system, you can offer better prices to car owners than those recommended by vehicle-factory flat rate schedules, and still make a generous profit yourself. This leads to the second element:

2.—Proper pricing of your service labor.

3.—Good supervision and working together of shop personnel. (If yours is a one-man shop, you still have yourself to supervise!)

4.—Adequate labor-saving tools and equipment to counterbalance high labor costs and to increase your output per manhour.

5.—Journeyman mechanics who are provided with incentives.

6.—Consistently good workmanship based on knowledge and experience.

7.—Aggressive and continuous promotion of service sales.

The eighth element, that of aggressive and continuous promotion of your service sales, is supposed to be the main subject of my remarks tonight. The seven elements which precede it, however, are essential if the eighth is to pay off.

What is at stake for you that we should give time and thought to this subject? What makes it important in our individual business and family lives? Let's take a look, and I will try to avoid as many statistics as possible, because, you see, I hate statistics.

Business in the United States never again will be small. Each



By WALTER A. KIRKPATRICK
Manager, Advertising and Sales Promotion
Wilkening Manufacturing Co.
Philadelphia, Pa.

Excerpts from an address recently before the garagemen's association at Roanoke, Va. The speaker has long been active in the automotive aftermarket industry and has spoken before a number of Southern automotive conventions.

year there is a tremendous increase in the population. You now have far stronger consumer buying power through higher wages. U. S. families with incomes of \$5,000 or more increased from 6 million in 1941 to 16 million last year. Think of that!

The U. S. Bureau of Roads estimates that vehicles on the road by the end of 1955 will be 61 million.

By the end of 1965 there will be 81 million.

Only three years ago the president's materials policy commission figured it would be 1975 before we would have 85 million vehicles, so we are now running about ten years ahead of this schedule. . . .

There's a big change taking place. And . . . it adds up to a big opportunity for bigger sales for every one of us!

Another factor is the increasing emphasis everywhere on safety. The number of safety-conscious car

owners will increase still further next year as at least one of the "Big Three" vehicle makers will design its 1956 models around safety features.

We also have been hatching a new brood of relatively receptive service and maintenance buyers because of the numerous compulsory inspections and voluntary safety checks which are now being operated each year. The public's mind will be kept focused on safe cars and on safe driving. Each of you has the opportunity to cash-in on this.

That's why it is worth-while for each of us to spend some time discussing the drive for sales in the changing automotive service market. . . .

In the drive for sales, you and your employees can be every effective personal salesmen and ambassadors of good-will for your business. The service business will go where it is invited. You and your employees can do a lot of personal inviting, if you plan it so.

Your place of business can be a magnet that attracts customers and makes sales. It goes without saying that it should be a clean, orderly and attractive place. Identify your place with a conspicuous outside sign showing your name and your services. This will invite car owners in.

How about the location of your place of business? Are you in the best traffic areas? Is it easy to get in and out of your shop? Are you in a favorable location competitively? It is good business strategy to have a favorable location for your shop — and to move if your location can be improved substantially. That's what progressive merchants are doing today all over the country.

Look also to the layout of your shop. This is part of efficient shop management and helps do more jobs faster . . . but it also is part of merchandising. An efficient shop layout makes a favorable impression on customers, increases their

(Continued on page 76)

Hudson for '56

HUDSON Motors' 1956 Hornet and Wasp models feature V-line styling, inside and outside, and a new 220hp V-8 engine for some models.

The line includes a custom four-door sedan and two-door Hollywood hardtop in the Hornet V-8 series; a super and custom four-door and custom two-door Hollywood hardtop in the Hornet "Six" series, and a four-door sedan in the Wasp series.

All Hudson models utilize the new and modern squeeze-type safety door handles, eliminating hazardous protrusions.

The dash panel is highlighted by an easy-to-read instrument clus-

ter, featuring a horizontal "thermometer"-type speedometer, centered in front of the driver. The top of the dash panel is lined with a soft "crash pad" made of Royalite. All Hudson custom models have a new burnished and perforated aluminum trim insert extending across the entire panel width.

Hudson line offers a six-tube radio as optional equipment, with speakers mounted at each end of the dash panel for better tonal effects for both driver and passengers.

All models are equipped with a 12-volt electrical system, insuring better ignition performance, higher generator output, higher en-

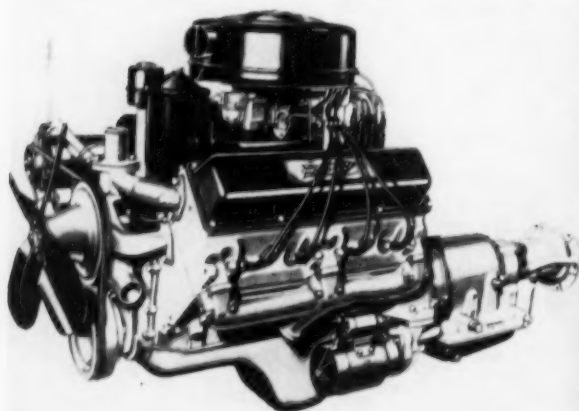
gine cranking speeds for faster cold weather starts and increased power to operate optional power assists.

The Hudson Hornet V-8 engine, developing 220hp, has a compression ratio of 9.55 to 1 and a displacement of 352 cubic inches. This overhead valve V-8 engine has a short-stroke, low-friction design for greater power and better fuel economy. It also features a new high-lift camshaft, a twin-throat down-draft carburetor, five main-bearings, and is 100% counterbalanced.

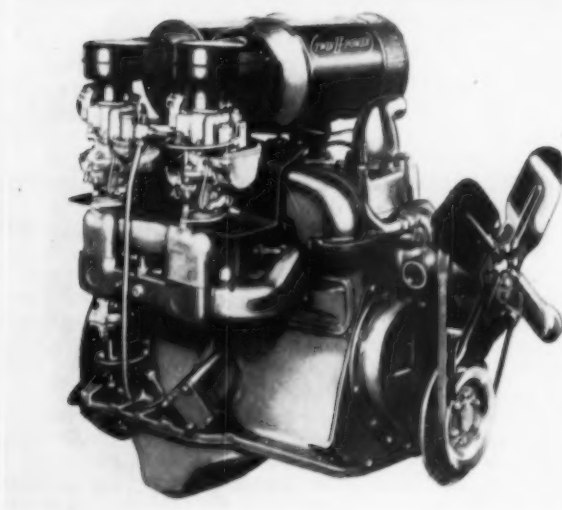
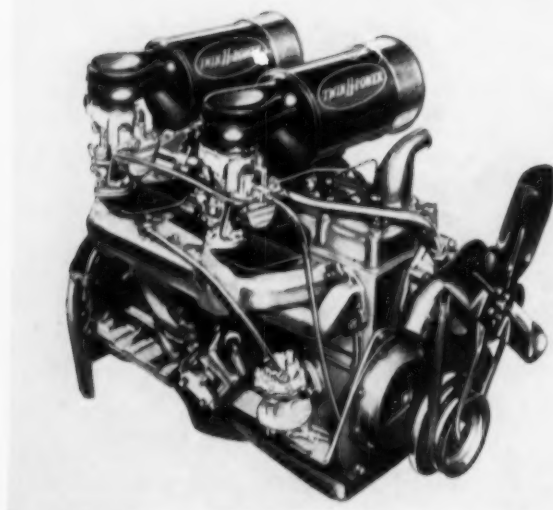
The Hornet Championship Six, with new hydraulic valve lifters and an improved camshaft design, is offered on all Hornet models. Its horsepower has been increased to 165, with a compression ratio of 7.5 to 1. The Championship Six also is offered with "Twin H-Power," delivering 175hp, available as

(Continued on page 50)

Below: The Hornet V-8 develops 220hp.
Bottom: The Hornet Championship Six develops 175hp.



Below: Note the V-line styling of this Hornet sedan.
Bottom: The Wasp "Hi-Torque" develops 130hp.



They're Not Afraid Of the Big, Bad Union!

Happy Employees Are the Answer

Why do employees stay with a firm? What is being done to tie employees closer to management? A staff correspondent surveyed the field and came up with these actual examples.

ARE your service employees satisfied? Are you sure?

How, in fact, can you be sure?

Let's look at some cases where managements feel sure.

Here is one dealership that is absolutely certain:

Its shop recently took a vote on whether they should become unionized. The question was in the air as the AFL Brotherhood of Teamsters and Machinists Unions inaugurated a drive with a \$200,000 fund to organize salesmen and shop personnel, and this shop of 40 mechanics turned it down three to one.

Several had been with the dealership for 17 years; most averaged eight years; a certain number had come into the company as young apprentices and had moved up into well-paying supervisory posts. Most of them could boast that they earned as high as \$130 a week in good periods, with top producing mechanics \$200. Body shop men were making \$150 a week. They were satisfied with the status quo.

Wages were no question here; they had been given a choice of a 60 - 40 plan plus incentives, or a straight 45%, and, after discussion, decided to try out the straight 45%. They are free to reconsider and try out the alternate plan.

But it was not wages that determined their vote against a union shop. It was the recognition that an employer - employee relationship could not be reduced to a pay formula, that contentment was not predicated on the pay envelope. It was a conviction that no outside organization could do for them what they could not do for themselves.

And this was possible because of the personal relationship existing between employer and employee, the freedom they had to challenge, discuss and amend any practice that affected them. This was a two-way street where a mechanic had his say as well as the boss.

"We have a flexible policy," said this dealer. "We impress on our employees that anything can be changed if they wish it to. We let them know we're

concerned with their happiness and well-being. We take them into our confidence, share shop profit with them when the times are good, but they know this is a highly competitive business and when things get tight, we cannot extend incentive prize campaigns.

"They also know we have put heart into business. A mechanic who has been ill in the hospital for six weeks has been receiving his full salary weekly. During the hospitalization of one of our supervisors, we paid him full wages and continued the use of a company car, that had been allowed him in his work, for his wife."

Closer personal relationship between sales and shop is also encouraged in social get-togethers, like a bowling team, fishing trip, Christmas parties with baskets of complete Christmas dinners, and the distribution of baskets by employees to worthy needy persons named by the welfare department.

Shop employees are allowed 15 days sick leave a year, seven paid holidays and one week of paid vacation at earnings averaged over their best weeks.

Now here is an independent garage operator who believes the loyalty and contentment of his shop personnel, as indicated by stability and concern for his business success, were established with his profit-sharing plan. Putting his 14 shop employees into business with him by dividing among them 75% of the net profit has brought them close to the core of his business, since they have a personal stake in its ups and downs.

"When you place employees on a par with the owner by letting them in on all the workings of the business, by inviting their ideas and suggestions, and threshing out all questions by a free-for-all discussion, then taking a vote, you have shop personnel that identify themselves as business owners.

"They do not need an outside organization to win benefits, higher pay, a shorter work week, or justice from the boss. They can vote it in for themselves if they wish to," said this independent who turns a meeting over to his employees once weekly, and follows it up with refreshments and a little social relaxation in his basement recreation room.

"Discontent? A meeting where anyone can get up and say what he damned well pleases clears the air of grievances. Any man who feels he has been unjustly treated gets a fair hearing from his fellow workers; they listen and decide what went wrong, and settle to the satisfaction of those concerned. It makes for a healthy atmosphere."

The test of the shop's satisfaction, this independent felt, was their long service with the company. Going down the list he pointed to a lube man with 23 years of service, a mechanic with 13 years, another with nine years, tune-up man with nine years, a wash boy with five.

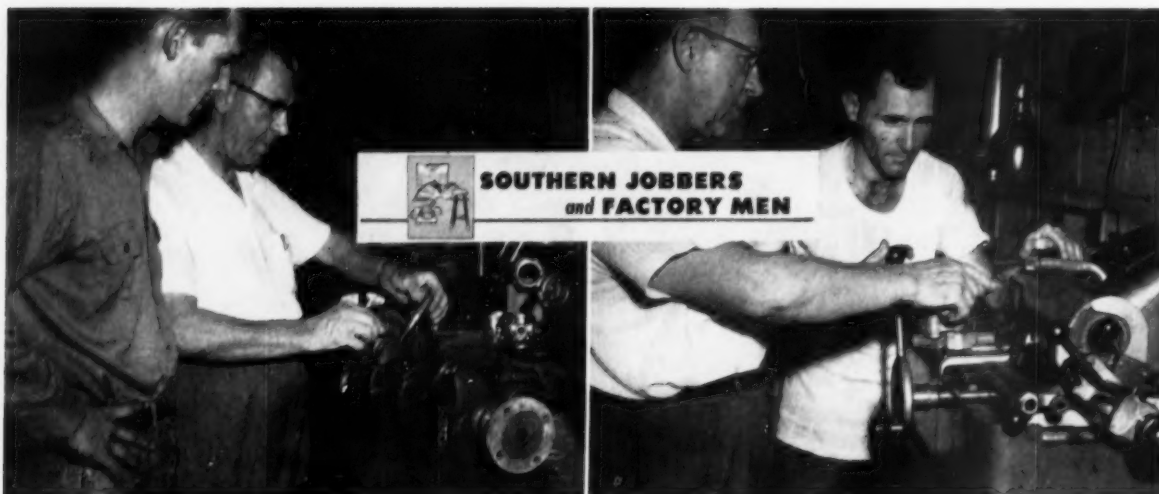
Personal interest in the well-being of each mechanic and his family may mean financial assistance over an emergency.

Help may take the form of selection of a home, discussion of a personal problem, legal help when necessary. Sick leave, hospitalization, a week's vacation with pay are employee benefits.

It is this basic cooperation and harmony between employer and employee, according to this independent, that spells satisfaction.

Another dealer in the metropolitan area who is certain his employees are happy and satisfied, with high morale, low absenteeism, high production and absence of labor turnover, believes the cornerstone

(Continued on page 50)



Owner Van F. Lippard of Auto Parts and Machine Co. is quite at home handling a micrometer. His training program similarly equips all of his mechanic-salesmen too.

Valve grinding is one of many phases of shop work which an apprentice learns. This firm's customers have shown greater respect for salesmen trained in the shop.

He Shop-Trains Salesmen

THE shop-trained salesman, or, putting it another way, the mechanic with sales training, can do a better selling job than anyone else because he knows what he is talking about, according to Van F. Lippard, owner of Auto Parts and Machine Co., Rockville, Md., who attributes over 50% of sales volume to sales-trained mechanics.

And the key to retaining skilled mechanics is training them yourself from scratch, with sales training paralleling instruction in skills.

"One day one of our salesman arrived at a garage where the owner was struggling with a clutch that he could not get in," he said. "Pulling off his coat, our salesman got under the car and put the clutch in within a few minutes. For the first time our salesman got an order out of this garage, for \$75 at that, when on every previous visit he had been cold-shouldered by the garage owner.

"Our salesman won the customer's confidence by showing him how to do it. Today he lets him check stock and fill in on what he needs. That story typifies the thinking behind our sales-training approach to making all-round mechanics.

"They are in the most favorable position to do intelligent selling to the customer. Actually our sales-

trained mechanics can outsell our regular salesmen any day."

Pointing out that his shop, sales and management personnel at their Rockville and Washington, D. C., locations were 100% trained by the company, Lippard indicated that he preferred hiring the mechanically-minded young applicant of 17 or 18, about to finish school, who may begin by working part-time after school hours.

"In a personal interview you can tell very definitely whether a young man is mechanically-minded by the way he talks about cars, whether he has tinkered around cars, whether he wants to learn more about cars and advance himself in the automotive field," explained Lippard, who is an automotive engineer, machinist and inventor, and past president of the Greater Washington Automotive Trade Association. "Within a short time at a part-time job it becomes very evident if mechanical ability is there or not."

Lippard does not require any previous shop experience at school, since many schools do not provide this opportunity. He notes during the personal interview his impressions of the applicant's personality: self-confidence, a firm belief in the field of his choosing, steadiness, good appearance, good attendance

record at school and eagerness to learn. If any doubt exists, he checks with the school or former employers, if the applicant has had any.

The first jobs an apprentice is assigned is straightening up stock, checking the arrival of parts against the invoice, learning where the parts go in the bins, cleaning and dusting stock and keeping it in neat order, and sweeping up and cleaning.

During this period he is learning the names of parts, where they go in a car, their function. He is sent out to customers to deliver parts, and so gets acquainted with the store's customers at their places of business and when they come to the counter. Making himself generally useful, he is required to keep shop tools in order, clean them and keep them in their proper places.

He is learning the names of tools like the power wrench, torque wrench, etc., where they are used, how they are used and their location in the shop. He may be taught during these first few weeks mixing paint, waiting on customers at the counter and helping out in the shop, like buffing off valves for re-facing and cleaning parts.

After an apprentice learns to clean parts, he may be shown in



With the boss looking on, an apprentice uses an inside micrometer.

cleaning a piston how to take off the old rings, disassemble the piston and see that all parts are properly marked and identified to go back to the same rod. He is shown how to clean carbon out of ring grooves, rinse and ready the part for honing or reaming. He learns to fit pins under the supervision of an experienced machinist. When he learns how to get the proper fit, he may be put on his own in pin fitting. Learning to expand pistons is his next step. He is taught electric welding and cold welding after he is taught re-boring. In the shop he learns to turn a brake drum and relin brake shoes.

He learns to use a micrometer to within ten-thousandths of an inch before he gets to precision work.

"We impress on them how important it is to clean a part thoroughly, checking for abrasion, dust or grit which can throw off the measurement. If he is to get a proper reading, he must clean a part thoroughly before assembling and miking it," commented Lippard.

From the first days of apprentice training, an attitude of friendliness and service to customers is noted. He is taught that the customer will rely on his ability and know-how; he is in a position to

show the customer by "miking" the proof of wear in a cylinder and that a replacement of the part is necessary. He is taught in checking a car to observe condition and needs of the car, like rings, bearings, fan belts, fuel pump, carburetor, points, condenser, ignition, king bolts and bushings and shocks.

"A mechanic who is looking over a car can accomplish a great deal. It will take only a few minutes to check and show a customer worn or broken parts. His relationship to the customer as he looks over the car puts him at an advantage; the customer is more receptive to suggestions, and appreciative when minor repairs are caught and small repair bills follow," said Lippard.

"We discourage an overbearing manner or pressure of any kind when selling a customer. At the same time we want our mechanics alert to the advantage they have in suggestive selling on what a car really needs."

An apprenticeship may take from one-and-a-half to two years under an experienced teacher. During this time an apprentice's wages are raised every six months. As a part-timer he may have started out with 50¢ to 60¢ an hour, and within a few weeks be

advanced to 75¢ an hour.

In two months he will be stepped up to the next level in the wage scale, so that by the end of two years the average mechanic will be receiving journeyman's wages.

Auto Parts and Machine Co. is convinced that company-trained mechanics demonstrate more loyalty and devotion to the management that reared them from youth than hired, experienced salesmen. Morale is higher, production is higher and quality of production is higher, according to Lippard. As salesmen, company-trained men do the top job.

"A young man who has learned his trade at your bench feels a part of your family. When he can go around saying that everything he knows in automotive repair and in rebuilding motors he has learned at your workbench, he is not very likely to leave you."

Timken Picks Wingerter As General Manager

THE Timken Roller Bearing Co. has advanced Robert G. Wingerter from assistant general manager to general manager of its automotive division, succeeding Edgerly W. Austin, who has retired.

Wingerter, who joined Timken in 1938, has been a sales engineering trainee, an application engineer and assistant chief engineer. Austin, who had been general manager since 1928, will remain with the company in a consulting capacity.

MEMA Elects Directors For Two-Year Terms

FOUR men have been elected directors of Motor and Equipment Manufacturers Association for the 1956-58 term: A. J. Bradley, Commercial Solvents Corp., New York City; S. G. Phillips, The Dole Valve Co., Chicago; J. M. Wells, Ingersoll-Rand Co., New York City, and J. D. White, Triplex Corp. of America, Pueblo, Colo.

C. P. Brewster of K-D Manufacturing Co., Lancaster, Pa., was elected a director for the 1956 term.

R. M. "Bob" Pore, formerly with **Maremont Automotive**, is now sales manager at **Terry Automotive Supply**, Dallas, Texas, it was announced by Manager **J. Kenneth Terry**.



Aft on the fantail you see most of the approximately 130 persons making the NCAWA convention cruise.

Sailing Did the Tarheels Go

"A hurricane is offshore, so we won't sail until tomorrow," said the skipper, so the approximately 130 persons attending the convention cruise of the North Carolina Automotive Wholesalers Association got back last month from Bermuda a day late—at no extra expense! Below: A portion of those attending one of the two business sessions held in the forward lounge of the luxury vessel. Bottom: Governor Luther H. Hodges (white jacket) of North Carolina expresses thanks for a gift from the shipping line. At extreme left is Mrs. Hodges. Seated at right are Mr. and Mrs. R. E. Kirkland of Wilson. Jobbers and factory men from half a dozen states were aboard. On portions of two days many persons found their time best spent in feeding the fish. These pictures came from the camera of Carl S. Johnson, Automotive Electric Associates, Charlotte, N. C.

Below: At sea and liking it! They are (in foreground, l. to r.): Jesse F. Jones, Jr., executive secretary of NCAWA; Frank McKenzie, a wholesaler of Bluefield, W. Va., and long-time friend of the governor, who is seated, and E. L. "Ed" Brown of Hickory, president of NCAWA. They were watching skeet shooting off the fantail, in which the governor proved to be a good shot. Bottom: The captain's farewell dinner was a lavish affair from the standpoint of color and gaiety as well as food. Here you see the governor's table. A masquerade party, deck and card games were featured during the six-day cruise. Cecil Morris of Greenville and James Bagwell of Charleston discussed plans aboard the ship for a South Carolina association. The governor was the principal speaker. William C. "Bill" Herbert, who is editor of this magazine, also spoke.





Top: Nathan M. Roberts, executive secretary of the Automotive Wholesalers' Association of Alabama, was speaking when this shot was made. It shows only a portion of the audience of around 200 attending the morning business session. Above: The officers and directors for the next year are (l. to r.): Front row, E. E. McCall of Lake City, Marshal G. Luce of Miami; A. B. Estridge of Sarasota, treasurer; Edgar A. Rogers of Consolidated Automotive, Jacksonville, president, and Ted Nelson of Miami, retiring president; back row,

Dave Wilson, Sr., of Miami, W. C. Stephens of Partico Automotive Supply, Tampa, vice-president; J. C. Stradley, Jr., of Orlando, Ray D. Banks of Fort Lauderdale, Clarence Babbitt of Tallahassee, secretary; D. D. Barker of Pensacola and Charles H. "Chuck" Davis, executive secretary of the group. Top: A view showing only a portion of one of the two auditoriums in which approximately 100 manufacturers held table conferences. Above: Under-the-palms banquet attracted approximately 300 persons.

300 Attend Florida's Big Success

THE success of the first annual convention of the Florida Automotive Wholesalers Association surprised even some of the planners.

So well attended was the two-day meeting at Orlando last month (approximately 300 persons, including scores of jobbers), that reservations overflowed from the headquarters hotel into other nearby hostilities. What started out to be an afternoon of factory-wholesaler table conferences in leisurely fashion turned out to be a jam-packed session with space at a premium, since around 100 tables were engaged and tables had to be crowded close together to satisfy the demand. Even the food gave out at the banquet because of the high attendance and because some persons failed to register in advance.

The association, which has sprung to a membership of 90 from the organizational meeting in June, 1954, drew applause from wholesalers and factory men alike for the streamlined fashion in which the program was directed by that combination association man,

factory executive and wholesaler, Charles H. "Chuck" Davis, executive secretary.

Among the speakers were Nathan M. Roberts, executive secretary of the Automotive Wholesalers' Association of Alabama, who discussed association planning; Marcus A. Brown, vice-president of Aetna Finance Co., who explained the C-A-S plan of financing repairs; Ed Wimmer of Cincinnati, Ohio, vice-president of the National Federation of Independent Business, Inc., who assailed factories in general for direct selling which fails to recognize the important role of the wholesaler; B. W. "Whit" Ruark, general manager of Motor and Equipment Wholesalers Association; Lieut. Carl Adams of the state highway patrol and William C. "Bill" Herbert, editor of SOUTHERN AUTOMOTIVE JOURNAL.

Pressure of time blocked out a clinic to be moderated by Marshal G. Luce of Miami with J. W. Allen of Gainesville, Warren A. Birt of Jacksonville, J. H. Breze, Jr., of Delray Beach, F. M. Henson of Marianna, T. H. Johnson of Pensa-

cola, A. L. LeVeille of Daytona Beach, F. L. Rawls of Tampa, E. P. Roberts of Winter Haven, W. Sargent of Melbourne and Dave Wilson, Sr., of Miami.

Ted Nelson, a "founding father" of the association, announced his resignation because of his becoming a factory representative, having left Berner-Pease, Miami. He is now handling at Miami a line of hose and fittings for automotive, marine and industrial use.

A cocktail party was sponsored by the Jacksonville and Atlanta Booster Clubs.

Mobile Firm Names Weaver President

MOTOR Parts & Supply Co.'s board of directors has elected L. O. Weaver as president to succeed J. L. Cagle, who resigned to enter business for himself.

Other personnel remain the same with Bevil T. Amos as purchasing agent and P. E. Duval, treasurer and office manager. Charles W. Wardrop has been added to the sales force.

(More Jobber News on page 103)



SERVICE and MAINTENANCE

Sparking Up the Spark Plug

MOST of us at one time or another have been through what appeared to be an epidemic of spark plug failures, but when a diagnosis was made the trouble was usually found to be something other than plugs. However, in far too many cases, plugs are replaced with new ones and failures go on and on.

Most spark plug problems are caused by "plug fouling" and, in general, there are three kinds: 1. Carbon fouling. 2. Lead fouling.

*Technical data courtesy of
The Electric Auto-Lite Co.,
Toledo, Ohio.*



By E. M. Lowery
Technical Editor

Fig. 1—Correct plug application would have prevented these failures.



3. Detergent oil fouling of plugs.

Carbon fouling is the result of the deposition on the spark plug insulator tip of carbon deposits which are conductors of electricity at all temperatures. Carbon deposits are formed in the cylinders as the result of incomplete combustion, and since combustion is never 100% in actual practice, a small amount of carbon always tends to form on all surfaces within the cylinder. When carbon deposits in the combustion chamber are heavy and spark plugs foul out in a short period of time, it can be concluded that carburetion is rich, oil consumption is high, or engine temperatures are abnormally low. The spark plug is thus an indicator of engine performance and operating conditions and excess carbon deposits should always be regarded as proof of an uneconomical operation.

In order to obtain relief from carbon fouling, it is customary to use hotter plugs, but if all the fouling is due to a carburetion condition, an oil pumping condition, or an engine temperature condition, the preferred solution would be to correct the difficulty rather than attempt to overcome an engine defect with a hot plug.

Hotter-type plugs are effective in reducing carbon fouling because very little carbon will deposit on a surface operating at a temperature about 1000°F. If a plug can be chosen in which the insulator tip stays above this temperature during most of the operation, carbon fouling will be reduced. It should be remembered, of course, that spark plugs which are too hot will cause pre-ignition as manifested by backfiring through the carburetor, and it is possible that damage to the engine will result.

Most practical fuels have a pre-ignition temperature in the vicinity of 1500°F. It is therefore necessary that the spark plug insulator tip, which is the hottest part of the plug, should not exceed this temperature under any conditions of operation.

Lead fouling is the result of the deposition on the spark plug insulator tip of lead oxide deposits which are conductors of electricity at temperatures above 1000°F.

Lead tetra-ethyl bromine is added to some fuels to increase the octane rating and thereby reduce detonation. The actual fluid that is added to the gasoline contains bromine, the purpose of the bromine being the formation of lead-bromine which is volatile at low temperatures instead of lead oxide which is volatile only at high temperatures.

The object of encouraging the formation of lead compounds which are volatile at low temperatures is based upon the known fact that such materials will pass out of the cylinder through the exhaust ports, whereas lead compounds which are volatile only at high temperatures will tend to stay within the cylinder and deposit on the various surfaces, including the spark plug insulator.

However, because of the corrosive nature of bromine, it is not practical in actual practice to use a sufficient quantity in the lead tetra-ethyl bromine fluid to assure the formation of nothing but lead bromines which volatilize at low temperatures, and in practice a certain amount of lead oxides always tend to deposit on insulator tips.

Lead fouling can be reduced by the use of hotter spark plugs because the rate of deposition on hot surfaces is less than on cool surfaces. However, it cannot be stopped completely because in order to do this, it would be necessary to operate insulator tips above 1500°F. and pre-ignition would occur.

Due to current engine design, detergent oils have been placed on the market. Many of these oils contain metallic soaps and in the com-



Top: Fig. 2—Installing new or used plugs, always use a new gasket.
Above: Fig. 3—Whenever possible use a torque wrench.

bustion process, metallic oxides are deposited in the combustion chamber and on the spark plug insulator tips. These oxides are also conductors of electricity at engine operating temperatures and react on the spark plug as do carbon and

lead oxides.

Hotter plugs will tend to reduce these deposits, but due to their nature, a plug temperature sufficient to eliminate completely the formation of these deposits would be well over pre-ignition temperature.

It should be noted that fouling is a condition associated with insulator tips primarily and not with electrodes. Deposits on electrodes, either carbon or lead, are of relatively little importance except in starting, in which case lead oxide deposits, in particular, tend to make the spark plug require a higher operating voltage.

January: Bellows Power Brake

Ed Lowery will take you next month over the writing ropes so far as concerns the bellows-type power brake which is being used on the 1956 Dodge and Plymouth.



"Let me put it this way: One of us is going to fire the other and it happens I'm the boss!"

The result of increasing fouling problems brought about by the higher compression ratios, the manufacturers are recommending that spark plugs be serviced at intervals of 3,000 to 5,000 miles.

The selection of the correct spark plug (Fig. 1) for a given application will always improve performance and prolong plug life. In making this selection we should bear in mind that, in general, an engine operated at wide open throttle and high r.p.m. is one which subjects the spark plug to a high rate of heat input and a relatively cold plug should be used, whereas an engine which operates at low throttle and low r.p.m. is one which subjects the plug to a low rate of heat input, in which case a relatively hot plug should be used.

Correct Installation of Plugs

Probably more actual plug failures are due to incorrect installation than to any other single cause. This is probably due to the fact that practically everyone thinks he can install plugs correctly, but experience has shown differently. Most mechanics never think of a torque wrench when installing plugs; many even use a used gasket.

It should be understood that plugs will attain excess temperatures unless installed so as to be in good heat transfer relationship with the engine cooling system.

Spark plugs when exposed to heat will attain the temperature of the source of the heat unless a portion of the heat received is passed on to a system of lower temperature.

Before removing the plugs from an engine, both the plugs and the plug wells should be cleaned to prevent any foreign particles from falling into the cylinder.

Prior to installing new plugs the

threads should be inspected and the gasket seats should be wiped clean. Clean gasket seats are very important.

There are two types of gaskets in general usage: the so-called "folded" automotive type and the "solid" aircraft type. (In either case a new gasket should always be used. (Fig. 2.)

The "folded" automotive type is suitable for the great majority of applications and has the advantage of acting like a torque wrench to a certain extent in that when on collapse the mechanic is signalled that sufficient torque has been applied. However, "folded" gaskets do not maintain as good a heat transfer relationship with the cooling system of the engine as the "solid" type gasket.

Nearly 100% of the heat received by a plug must eventually be transferred to the cooling system through the external seat gasket and for this reason, gaskets must be properly compressed. So refer to the "specs" and use the torque wrench whenever possible. (Fig. 3).

Plug Condition Chart on Opposite Page

The following spark plug diagnosis chart should be of value to the mechanic during his effort to return the engine to peak operating condition:

"Yeah, I'm an 'independent' dealer—the bondsman of the manufacturer who sets my quota and the slave of the customer who chews my profit margin so thin I can't see it."



Plug Condition	Factors Causing This Condition	Corrective Action
Plug "flash over" (firing from upper terminal to base of plug).	Dirty insulator tops—oil dirt and moisture on insulator will shunt current to base of plug. The above condition can be caused by failure of plug boot.	Keep plugs wiped clean with cloth moistened with cleaning solvent. Check plug boot and replace if necessary.
Oil or carbon fouling.	Wet, black deposits on firing end of plug indicate oil pumping condition. This is usually caused by worn piston rings, pistons, cylinders or sticky valves.	Correct engine condition. In most cases plugs in this condition will be serviceable after proper cleaning and regapping.
	Soft, fluffy, dry black carbon deposits usually indicate a rich mixture operation of automatic choke or faulty adjustment of carburetor	If troubles are not eliminated, use hotter-type plug.
	Hard, baked-on, black carbon deposits result from use of too cold a plug.	Use hotter-type plug.
Lead fouling (light and powdery or shiny glazed coating on firing end).	By-products of combustion and fuel additives, deposited as a powder which may later melt and glaze on insulator tip.	Remove deposits by blast cleaning. If this is not possible, plugs should be replaced.
Normal electrode wear.	Due to intense heat, pressures and corrosive gases together with spark discharge, the electrode wears and gap widens.	Plugs should be regapped every 5000 miles.
Rapid electrode wear.	Condition may be caused by (1) burned valves, (2) gas leakage past threads and seat gaskets, due to insufficient installation torque or damaged gasket, (3) too lean a mixture or (4) plug too hot for operating speeds and loads.	Correct engine condition. Install plugs to specified torque. Use a new plug seat gasket each time a new or cleaned plug is installed. Use colder-type plug if condition continues to exist.
Broken upper insulator (firing around shell crimp under load conditions).	Careless removal or installation of plug.	There is no remedy except replace with new plug.
Broken lower insulator (firing tip).	The cause is usually carelessness in regapping by either bending of centerwire to adjust the gap or permitting the gapping tool to exert pressure against the tip of the center electrode or insulator when bending the side electrode to adjust the gap.	The only remedy is a new plug.
	Fracture or breakage of lower insulator may also occasionally occur if the engine has been operated under conditions causing severe and prolonged detonation or pre-ignition.	Use colder-type plug for the particular type of operation.
Damaged shell.	Very seldom occurs, but cause is almost always due to mishandling by applying excessive torque during installation. This failure is usually in the form of a crack in the Vee of the thread next to the seat gasket or at the groove below the hex.	The only remedy is a new plug.



BODY SHOP OPERATIONS

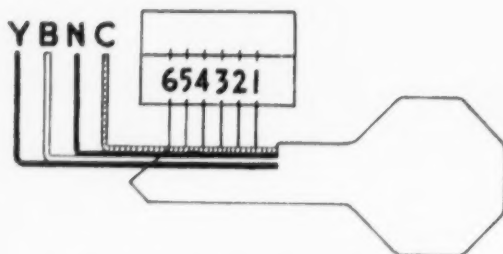


Fig. 1—Tumbler requirement diagram.

Locks and Keys

By E. M. Lowery
Technical Editor

IT CAN be embarrassing if we don't have the right answer when an owner calls in saying that he has lost all the keys to his car and wants to know if we can give him any help.

In most cases his question is met with another question, such as, "Do you have the lock cylinder code number?"

It should be the responsibility of the seller of a new car to keep a permanent record of the lock code numbers on every car sold.

Given a code number, any locksmith and/or the average shop with inexpensive key-making equipment can make a set of keys in a few minutes. When the code number is not available, it is usually necessary to replace the entire lock cylinder.

Some manufacturers supply replacements in single units and some in "kits" of three — ignition and door, glove box, trunk. These lock cylinders are usually uncoded.

For instance, the '55 Chevrolet:

These lock cylinders are furnished for service uncoded; this will make it necessary to code all replacements.

The side bar type lock is used for the ignition, door and trunk lid on passenger cars. Glove compartment locks are wafer tumbler

single-bitted type having four tumblers on passenger cars. These locks are all coded the same, allowing a usage of one key for all locks on the vehicle. To protect owners, automobile lock manufacturers stamp the lock number on the lock core, shaft, etc., where they will not show until the lock is removed.

To obtain the code number, remove the door lock. The key number may be obtained from the lock core, shaft, etc., which will be the same on all of the other locks.

In addition, when a lock cylinder requires replacement the lock code number may be obtained either from the key, if available, or from the old lock cylinder which is being replaced.

Once the code number of the lock is obtained, look up this number in a key-cutting book. There are two types of code booklets in general use, one which lists the cutting code by letter C, N, B and Y. Numbers or letters are always recorded from the head of the key

to the end of the vehicle's key.

Numbers may be transposed to letters from numbers as follows:

Code book Numbers	Code book Letters
1	C
2	N
3	B
4	Y

All side bar locks furnished to the field by the parts department are uncoded; that is, they are furnished without tumblers, springs or spring retainers; these parts are serviced separately. The tumblers come in four different depths, indicated by colors "C" copper, "N" for nickel, "B" for black and "Y" for yellow.

The side bar locks have six tumbler positions, and in looking up the cutting code, the following may be used as an example. After key code number is determined, either from key or from number stamped on lock cylinder, refer to your code book and record the key cutting information as follows:

Key of lock code Number	Key-cutting code Numerical	Key-cutting code Alphabetical
8109	2-3-2-1-2-4	N-B-N-C-N-Y
Cutting or tumbler position from head of lock	1-2-3-4-5-6-	1-2-3-4-5-6

Technical data courtesy of
Chevrolet Division and Ford
Division.

The numbers or letters (depending on code book) which are written above the cutting or tumbler position indicate the different col-

or tumblers which are to be dropped into each tumbler slot of the lock: "C"—copper, "N"—nickel, "B"—black, "Y"—yellow.

Note: If code book used lists the key-cutting code numerically, the numbers must be transposed to letters as previously stated in order to select proper color tumblers for installation into the lock.

In cases where a code book is not available, the diagram as shown in Fig. 1 may be used to determine the tumblers required to assemble an uncoded lock cylinder.

1.—Lay the key on the diagram (Fig. 1) with the bottom of the key flush with the edge of the drawing, head and point carefully lined up.

2.—Read the code in letters C-N-B-Y from the head of the key to the end from positions 1 to 6 inclusive. As each depth is determined, write that letter in the blank space provided above the position numbers (1-2-3-4-5-6).

3.—With the key properly lined up on the diagram, all cuts that show in the first section are to be marked "C".

4.—Cuts that fall in the first black section mark "N".

5.—Cuts that fall in white section, mark "B".

6.—Cuts that fall in the second black section, mark "Y".

After the letters (C-N-B-Y) have been determined and written above the cutting positions the lock cylinder should be assembled as follows:

Lock cylinder assembly:

1.—Hold cylinder with head of cylinder away and, starting at the head of the cylinder, insert the tumblers in their proper slots in the order called for by the code, ribbed side toward you and long point down (Fig. 2).

2.—After all tumblers are in place, check for correctness with

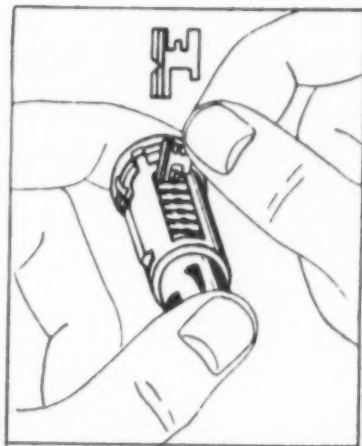


Fig. 2—Inserting tumblers.

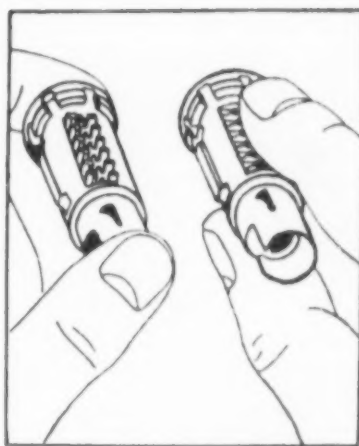


Fig. 3—Checking with code.

the code. Then press tumblers down with one finger (Fig. 3).

3.—Insert one tumbler spring in the space provided above each tumbler (Fig. 4).

Caution: If the springs are tangled, do not pull them apart; unscrew them.

4.—Reverse the lock cylinders so that the head of the cylinder is now toward you. Insert the spring retainer so that one of its six prongs enters into each of the springs and the two large-end prongs slide into the slots at either end of the cylinder (Fig. 5). Press the retainer down with one finger.

5.—To check, insert proper key, and if tumblers are installed properly, the side bar will be allowed to drop down. If bar does not drop down, remove the key, spring retainer, springs and tumblers and reassemble correctly.

Note: If the tumblers have not been assembled correctly and not

according to the code, the tumblers can be removed from the cylinder by holding it with the tumbler slots down, pulling the side bar out with the fingers and jarring the cylinder to shake the tumblers out. This procedure is necessary because after the tumblers have been pressed down into the cylinder they are held in their slots by the cross bar.

6.—If after checking it is found that the lock is assembled properly, remove key and place cylinder in vise, using leather or wood on each side to prevent damage to the cylinder.

7.—Stake the retainer securely in place by staking the cylinder metal over both edges of the retainer ends, using a suitable staking tool at right angles to the top of the retainer and from the cast metal of the cylinder over the retainer at each corner.

Door Lock Cylinder Replacement
—'55 Ford

When replacing a door lock cylinder on the 1955 Ford, it is recommended that a complete set of lock cylinders be installed. The set includes the ignition switch as well as lock cylinders for both front doors. This will avoid carrying an extra key when only one lock cylinder is replaced. It is not possible to adapt the old key to fit the replacement lock.

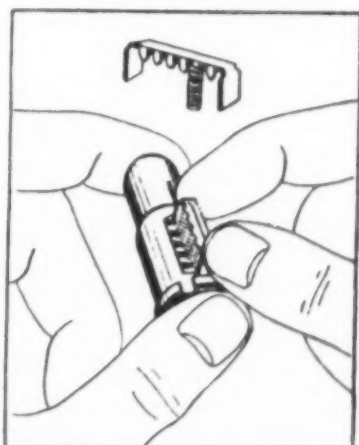
The key code number is stamped on the lock cylinder shaft. If new or duplicate keys are required and the key code number is unknown, the lock cylinder must be removed to obtain the code number.

The lock cylinder is secured in the door with a horseshoe-type retainer which is located under the door weatherstrip. To replace the

Fig. 4—Inserting tumbler springs.



Fig. 5—Inserting spring retainer.



January: Making Hoods Fit

Had any trouble making hoods fit? Instead of cussing, read next month Technical Editor Lowery's article on how to do this and yet live as the parson recommends.

lock cylinder, move the weather-strip to one side to expose the retainer. Pull the retainer out with a pair of pliers. Remove the lock cylinder from the door. Remove the rubber gasket from the station wagon lock cylinder.

To install, turn the key to the unlocked position in the cylinder. Insert the lock cylinder into the door. As the cylinder is inserted, guide the cylinder shaft and actuating lever into the door lock. Install the lock cylinder retainer.

Replacement of luggage compartment lock cylinder—'55 Ford:

On all except Fairlane models, the lock cylinder sleeve is integral with the door handle assembly. When installed, the handle assembly holds the ornament in place against the rubber pad.

To remove the assembly, open the door and work through the access holes in the inner panel. Remove the "push-on" nut from the bell crankshaft and disconnect the lock actuating lever link from the bell crank. Remove the large hex nut, flat washer and spacer from the lock cylinder sleeve. Remove the nuts and washers from the door handle studs. Then, from the outer side of the door panel, remove the door handle, lock cylinder and sleeve as an assembly. The ornament and pad will come off at the same time.

To install, insert the cylinder, from the outside, into the top hole in the panel, and the two handle studs into the bolt holes. Then, working through the access holes in the inner panel, secure the assembly to the door by installing the spacer, flat washer and hex nut on the cylinder sleeve. Install a flat washer, lock washer and nut on each of the two handle studs. Connect the lock actuating lever link to the bell crank, and secure it with the "push-on" nut.

Fairlane models have an ornament retainer instead of a handle and sleeve assembly. The lock cylinder sleeve is installed separately with a rubber pad between the sleeve and the door panel. The sleeve is attached to the panel and the cylinder is connected to the lock assembly in the same manner

as with other models. The ornament and retainer are attached to the panel by two studs, nuts, and washers.

Removal of lock cylinder from sleeve:

The procedure for removing the cylinder from the sleeve is the same for all models. With the cylinder and sleeve assembly removed from the door, insert the key into the lock cylinder, then turn the key one-quarter turn clockwise. With the key in this position, press the release pin down with a piece of wire to release the lock cylinder from the sleeve. Remove the cylinder from the sleeve.

To install the cylinder in the sleeve, insert the key in the lock and turn it one-quarter turn clockwise. Press the release pin down to the vertical position, then remove the key. Use B-4A-19587-A or its equivalent to lubricate the locking mechanism. Lubricate the lock cylinder with lock fluid (1A-19587-A).

Answer: Happy Employees (Continued from page 39)

of his employees' satisfaction is high earnings, hospital insurance, a \$2,000 life insurance policy, two weeks of paid vacation, six paid holidays a year. Excellent working conditions in a modern plant with modern equipment assures them a healthful environment, where maximum ability is brought out and efficiency follows.

An incentive pay plan is in effect for 15 mechanics. Paid 45% of labor produced, they get an additional 20% of all labor produced over a quota over a 26-week period. If mechanics work 44 hours a week, their bonus is equivalent to time-and-a-half for overtime. A top mechanic under this plan has earned as high as \$752 over a 26-week period and \$698 bonus for another 26-week period. Annual earnings of a top mechanic are in excess of \$7,600. Yearly earnings of other shop men average \$5,450. Earnings of the service manager exceed \$10,000, as he receives a salary, incentive on

labor sales and percentage on net profit.

No employee has left this organization for four years. Nor has anyone been taken on in the past two years, yet a long list of applicants for employment attests to the satisfaction of those on the inside. The word gets around that it's a good company to work for.

"We are a happy, close-knit family. We want our work conditions to be on a par with the very best in the industry, and are therefore always on the alert for better ways and improved means of doing things," said this dealer.

"At shop meetings we invite personnel to contribute workable ideas that will effect better working conditions, easier ways of doing things for them. We take no step, introduce no change that affects them without consulting them, asking them what they think. If it is urgent, the shop foreman canvasses their opinion from one stall to the next.

"What is good for them is generally good for the company, and it works the other way around too."

Hudsons for '56

(Continued from page 38)

standard equipment on custom models and optional on super models.

The Wasp is powered by the "Hi-Torque" six-cylinder, L-head engine developing 120hp, with a compression ratio of 7.5 to 1. This engine also is offered with "Twin H-Power" as optional equipment, increasing the horsepower to 130, with a compression ratio of 8 to 1.

Four transmissions are available. Syncromesh transmission is standard equipment on all models equipped with six-cylinder engines. Automatic overdrive and Dual-Range Hydra-Matic are offered as extra-cost optional equipment on all six's. The newly-improved Twin Ultramatic is available only on Hornet models powered by the new V-8 engine.

New "Selecto-Lift" starting is used on all Hudson models equipped with automatic transmissions. Ignition key starting is used on all other models.

All Hudson cars employ the "double-safe, single-unit car construction" with body and frame welded together to form a single-unit. According to engineers, this construction makes Hudsons safer, stronger, more rigid and rattle free.



Lasco MOUNTAIN MASTER

"America's Finest"

FOR AMERICA'S FINEST AUTOS AND TRUCKS
Bonded Riveted Shoes

LET'S LOOK AT THE RECORD... WORLD'S LARGEST CITY—NEW YORK—buys over 100,000 LASCO MOUNTAIN MASTER Brake Blocks in last few years, carrying millions of passengers safely.

WORLD'S ROUGHEST TRUCKING JOB—The Logging Industry in the Oregon—Washington—and British Columbia MOUNTAINS—demand LASCO MOUNTAIN MASTER Brake Blocks, because no other can stand up beside LASCO.

COAST TO COAST TRANSPORTATION COMPANIES—Manhattan to Hollywood—fine automobiles—RACE CAR DRIVERS from Mexico to Europe insist on LASCO MOUNTAIN MASTER Brake Lining, because it is dependable—safer to life—limb—and to equipment. They have discovered, as have thousands before—it's "AMERICA'S FINEST."

LASCO MOUNTAIN MASTER is advertised in LIFE—SAT. EVE. POST—COLLIER'S—and 20 OTHER U. S. and Foreign Trade Journals!

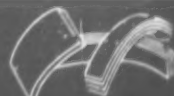
ORDER NOW—TRY IT—or you'll never know!



LASCO BRAKE PRODUCTS CORP., LTD.

ST. LOUIS, 2131 Locust St. • OAKLAND, 2615 Magnolia St. • PITTSBURGH, 5515 Penn. Ave. • MEMPHIS, 300 Madison Ave.
• KANSAS CITY, 1630 McGee St. • LOS ANGELES, 807 E. 8th St. • FORT WORTH, 910 Florence St. • SAN FRANCISCO,
78 - 12th St. • SALT LAKE CITY, 541 So. State St. • SEATTLE, 714 E. Pike St. • PORTLAND, N. W. 15th & Davis • SPOKANE,
1319 W. Second Ave. • SACRAMENTO, 1217 - 16th St.

LAHER INDUSTRIES



LAHER TIRE & RUBBER CO., INC. • LAHER BATTERY PRODUCTION CORP. • LAHER SPRING & TIRE CORP. • LASCO BRAKE PRODUCTS CO., LTD.

1956 PASSENGER-CAR SPECIFICATIONS

MAKE AND MODEL	ENGINE												WHEEL ALIGNMENT			BRAKES	
	Std. Wheelbase	No. Cylinders and Valve Arrangement	Bore and Stroke	Taxable H. P.	Max. Rated H. P. at R. P. M.	Camshaft Drive	Main Bearings	Crankcase Cap. (Qts.)	Air Cleaner	Oil Filter	Vibra. Damper	Cooling System (No Heater) (Qts.)	Caster (Degrees)	Camber (Degrees)	Toe-In (In.)	Service	Parking
BUICK Special & Century	122	V8I	4 x 3.20	51.2	226@4400	Ch	5	6	OB	Y	Y	17½	+½ to -1½	+½ to -½	½ to ½	H	RW
BUICK Super & Roadmaster	127	V8I	4 x 3.20	51.2	255@4400	Ch	5	6	OB	Y	Y	17½	+½ to -1½	+½ to -½	½ to ½	H	RW
CADILLAC 60	133	V8I	4 x 3½	51.2	285@3600	Ch	5	5	OB	Y	Y	17½	-½ to -1½	-½ to +½	½	H	RW
CADILLAC 62	129	V8I	4 x 3½	51.2	285@3600	Ch	5	5	OB	Y	Y	17½	-½ to -1½ -1 Prf.	-½ to +½	½	H	RW
CADILLAC 75	149½	V8I	4 x 3½	51.2	285@3600*	Ch	5	5	OB	Y	Y	17½	-½ to -1½ -1 Prf.	-½ to +½	½	H	RW
CHEVROLET 8	115	6I	3½ x 3½	30.4	140@4200	G	4	5	OB	Y	Y	16	+½ to +1½	0 to +1	½ to ½	H	RW
CHEVROLET 8	115	V8I	3½ x 3	45	162@4400¹	Ch	5	4	OB	Y	Y	16	+½ to +1½	0 to +1	½ to ½	H	RW
CHEVROLET Corvette																	
CHRYSLER Windsor	126	V8I	3.81 x 3.63	46.5	225@4400	Ch	5	4½	OB	Y	Y	24	-2 to 0	Left +½ Right 0	½	H	Ps
CHRYSLER New Yorker	126	V8I	3.94 x 3.63	49.7	280@4600	Ch	5	4½	OB	Y	Y	25	-2 to 0	Left +½ Right 0	½	H	Ps
CHRYSLER Imperial	133	V8I	3.94 x 3.63	49.7	280@4600	Ch	5	4½	OB	Y	Y	25	-2 to 0	Left +½ Right 0	½	H	Ps
CHRYSLER Crown Imperial	149½	V8I	3.94 x 3.63	49.7	280@4600	Ch	5	4½	OB	Y	Y	25	-2 to 0	Left +½ Right 0	½	H	Ps
CONTINENTAL	126	V8I	4 x 3.66	51.2	NA	Ch	5	5	OB	Y	Y	23	+½ to +1½	0 to +½	½	H	RW
DeSOTO Fire Dome	126	V8I	3.72 x 3.80	44.3	230@4400	Ch	5	4	OB	Y	Y	23	-2 to 0	Left +½ Right 0	½	H	Ps
DeSOTO Fire Flite	126	V8I	3.72 x 3.80	44.3	255@4400	Ch	5	4	OB	Y	Y	23	-2 to 0	Left +½ Right 0	½	H	Ps
DODGE Coronet 8	120	6I	3.25 x 4.63	25.4	131@3600	Ch	4	5	OB	Y	Y	13	-2 to 0	Left +½ Right 0	½	H	Ps
DODGE Coronet 8	120	V8I	3.63 x 3.25	42.2	189@4400	Ch	5	5	OB	Y	N	19	-2 to 0	Left +½ Right 0	½	H	Ps
DODGE Royal 8	120	V8I	3.63 x 3.80	42.2	218@4400	Ch	5	5	OB	Y	N	20	-2 to 0	Left +½ Right 0	½	H	Ps
FORD 8 Main, Cust., Fair	115½	6I	3.62 x 3.60	31.54	137@4200	Ch	4	4	OB	Y	Y	14½	0 to +1½	0"8' to +1"8'	½ to ½	H	RW
FORD 8 Mainline & Cust.	115½	V8I	3.62 x 3.30	42.5	173@4400	Ch	5	5	OB	Y	Y	19	0 to +1½	0"8' to +1"8'	½ to ½	H	RW
FORD 8 Fairlane	115½	V8I	3.75 x 3.30	45	200@4600	Ch	5	5	OB	Y	Y	19	0 to +1½	0"8' to +1"8'	½ to ½	H	RW
FORD Thunderbird																	
HUDSON																	
LINCOLN	126	V8I	4 x 3.66	51.2	285@4600	Ch	5	5	OB	Y	Y	23.2	0 to +1½	0 to +½	½ to ½	H	RW
MERCURY	119	V8I	3.80 x 3.44	46.21	210@4600	Ch	5	5	OB	Y	Y	19	0 to +1½	0 to +½	½ to ½	H	RW
NASH																	
OLDSMOBILE																	
PACKARD Clipper	122	V8I	4 x 3.5	51.2	275@2800	Ch	5	5	OB	Y	Y	26½	-1 to +½	0 to +½	0 to ½	H	RW
PACKARD Caribbean	127	V8I	4½ x 3.5	54.45	310@2800	Ch	5	5	OB	Y	Y	27	-1 to +½	0 to +½	0 to ½	H	RW
PACKARD	127	V8I	4½ x 3.5	54.45	290@2800	Ch	5	5	OB	Y	Y	27	-1 to +½	0 to +½	0 to ½	H	RW
PLYMOUTH 8	115	6I	3.25 x 4.63	25.4	125@3600	Ch	4	5	OB	Y	Y	13	-2 to 0	+½ to +½	½	H	Ps
PLYMOUTH 8	115	V8I	3.75 x 3.13	45	187@4400	Ch	5	5	OB	Y	N	19	-2 to 0	+½ to +½	½	H	Ps
PONTIAC Star Chief (Safari)	122	V8I	3.94 x 3.25	49.6	205@4600	Ch	5	5	OB	Y	Y	22.7	-1 to +½	+½ to +½	0 to .062	H	RW
PONTIAC Star Chief	124	V8I	3.94 x 3.25	49.6	227@4800	Ch	5	5	OB	Y	Y	22.7	-1 to +½	+½ to +½	0 to .062	H	RW
STUDEBAKER																	
WILLYS																	

ABBREVIATIONS

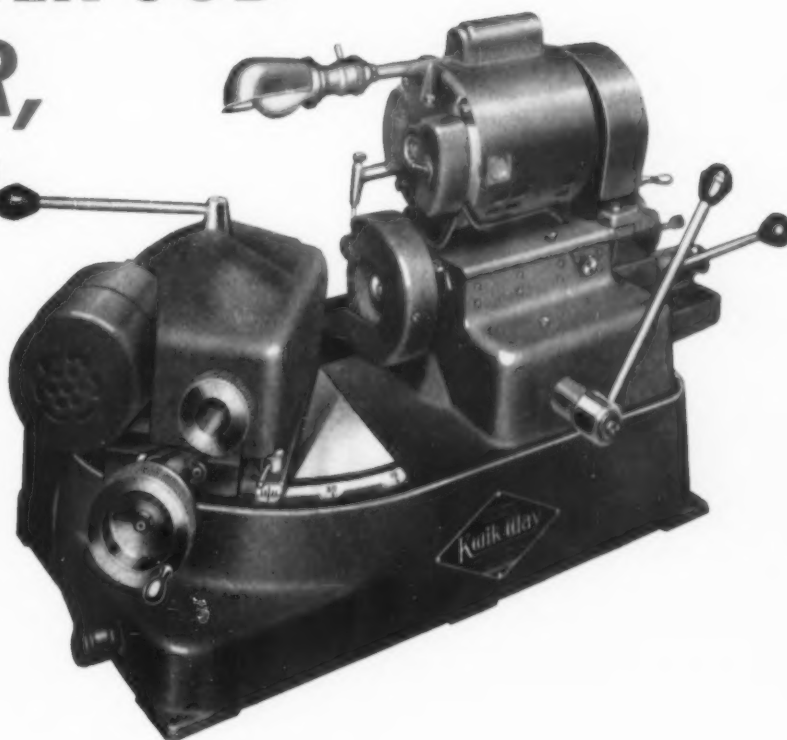
*—Eldorado 305@4700.
 1—170@4400 with Powerglide.
 G—Gear.
 H—Hydraulic.
 I—Valve-in-head.

L—L-head.
 N—No.
 NA—Modified Lincoln engine
 announced as "adequate."
 OB—Oil bath.

Prf.—Preferred.
 Ps—Propeller shaft, rear transmission.
 RW—Rear wheels.
 Y—Yes.

A BETTER JOB FASTER, EASIER

with the NEW
**KWIK-WAY
Super-Matic
Valve Facing
Machine**



This outstanding new valve facing machine makes it easy to obtain extreme accuracy and superior finish, with smooth, simplified operation. For better valve facing work, the answer is Kwik-Way's Super-Matic.

- extreme accuracy
- superior finish
- smooth, easy operation
- Micro-switch operating controls
- precision built, lever operated, 6-ball compound chuck
- chuck capacity 7/32" to 3/8"
- improved coolant system
- extra power with dual motors
- dove-tailed, handscraped ways with adjustable gib
- pre-lubricated, sealed bearings on grinder spindle
- rugged construction. Built to highest standards for fine machine tools.

See and operate the Super-Matic in your shop. No obligation.
Call your Kwik-Way representative for a free demonstration.

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VALVE FACING MACHINES • VALVE SEAT GRINDERS • VALVE SEAT INSERT TOOLS • VORTEX SUCTION DEVICE CYLINDER BORING MACHINES • LINE BORING MACHINES • PISTON CAM TURNING AND GRINDING MACHINES.

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Tell me more about this remarkable new valve facing machine.

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Company _____

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1956 PASSENGER-CAR SPECIFICATIONS

MAKE AND MODEL	TUNE-UP				ELECTRICAL				Bal.	FUEL SYSTEM				VALVES		
	Breaker Gap (.0)	Cam Angle (degrees)	Contact Arm Spring Tension (ozs.)	Spark Plug Gap (.0)	Ignition Timing	Timing Mark Location	Spark Advance Max. Centrif.	Spark Advance Max. Vac.		Cap. & Tar. Grd.	Carb. Mfg.	Model No.	Fuel Pressure (lbs.)	Tapset Clearance Intake (.0)	Tapset Clearance Exhaust (.0)	Intake Valve Opens b or a/c
BUICK Special & Century	12½-17½	Q	19-23	30-35	5°b/c	VD	13½°@1750	10.5°@12"	N62	St. (Ca) RP	St-WW	8½	6½	Au	Au	25°b/c¹
BUICK Super	12½-17½	Q	19-23	30-35	5°b/c	VD	13½°@1750	10.5°@12"	N62	St. (Ca) RP	Ca-WCFB RP-4G	8½	6½	Au	Au	30°b/c
BUICK Roadmaster	12½-17½	Q	19-23	30-35	5°b/c	VD	13½°@1750	10.5°@12"	N62	St. (Ca) RP	Ca-WCFB RP-4G	8½	6½	Au	Au	30°b/c
CADILLAC 60, 62 and 75	16-21	31+1½	19-23	35	5° 400 rpm	VD	9° to 11°@2000	16.5°@17½"	HG N70	Ca RP	WCFB23338 + 24345 7008750-51	5½ to 6½	5½	Au	Au	39°b/c
CHEVROLET 6	16-21	26-33	19-23	33-38	6°	FW	18°@1750	7½°@10"	N53	RP	7009254-55	3½-4½	3½	O	O	10½°b/c
CHEVROLET 8	16-21	26-33	19-23	33-38	4°b/c	VD	16°@1800²	11°@12"	N53	RP	7008387-88	4-5½	4-5½	O	O	18°b/c³
CHRYSLER Windsor	17	29-32	17-20	35	2°b/c	VD	13° to 15°@2020	12°@15"	N60	B&B	BBD23128	5-6½	5-6½	Au	Au	5°b/c
CHRYSLER New Yorker	17	29-32	17-20	35	4°b/c	VD	8½° to 10½°@2400	12½°@17"	N70	Ca	WCFB23145	5-6½	5-6½	Au	Au	15°b/c
CHRYSLER Imperial & Cr. Imp.	17	NA	17-20	35	4°b/c	VD	8½° to 10½°@2400	12½°@17"	N70	Ca	WCFB23145	5-6½	5-6½	Au	Au	1°b/c
CONTINENTAL	14-16	26-28½	17-20	32-36	5°b/c	VD	None	13¼°@1.88"	N65	Ford	NA	4½-5½	4½-5½	Au	Au	18°b/c
DeSOTO Fire Dome	17	29-32	17-20	35	8°b/c	VD	7°@800	12½°@15"	N60	B&B	BBD23088	5-6½	5-6½	Au	Au	4°b/c
DeSOTO Fire Flite	17	29-32	17-20	35	4°b/c	VD	9½°@2200	13½°@15"	N60	Ca	WCFB23115	5-6½	5-6½	Au	Au	15°b/c
DODGE Coronet 6	20	39+3	17-20	35	2°b/c	VD	9°@1700	9°@14"	N50	St	WW3-124	4-5½	4-5½	10	10	12°b/c
DODGE Coronet 8	17	29-32	17-20	35	4°b/c	FW	16°@2150	13½°@15"	N50	St	WW3-135	5-6½	5-6½	Au	Au	14°b/c
DODGE Royal 8 and Cuot. Royal	17	29-32	17-20	35	6°b/c	FW	17°@2375	12°@15"	N50	St	WW3-138	5-6½	5-6½	Au	Au	11°b/c
FORD 6 Main, Cuot., Fair.	24-26	35-38	17-20	32-36	4°b/c	VD	None	13½°@6"	N55	Ford	NA	4-5	4-5	19	19	24°b/c
FORD 8 Main, Cuot., Fair.	14-16	26-28½	17-20	32-36	3°b/c	VD	None	16½°@4.6"	N55	Ford	NA	4-5	4-5	19	19	12°b/c
FORD Thunderbird																
HUDSON																
LINCOLN	14-16	26-28½	17-20	32-36	5°b/c	VD	None	13½°@2000 @1.88"	N65	Ford Ho	NA	4½-5½	4½-5½	Au	Au	18°b/c
MERCURY	14-16	26-28½	17-20	32-36	3°b/c	VD	None	13½°@2.19"	N55	NA	NA	4-5	4-5	19	19	12°b/c
NASH																
OLDSMOBILE																
PACKARD Clipper Cuot. & Del.	16	27	17-20	33-37	5°b/c	VD	15°@2000	12°@12½"	N60	Ca	NA	3½-5½	3½-5½	Au	Au	14°b/c
PACKARD & Caribbean	16	26-33	19-23	33-37	10°b/c	VD	12°@2000	8½°@14½"	N60	RP	NA	3½-5½	3½-5½	Au	Au	14°b/c
PLYMOUTH 6	20	29-32	17-20	35	2°b/c	VD	9°@1300	9°@14"	N50	B&B	BBS22938	4-5½	4-5½	10	10	12°b/c
PLYMOUTH 8	17	29-32	17-20	35	4°b/c	CP	16°@2100	13½°@15"	N50	B&B	BBD22968 BBD2259813	5-6½	5-6½	Au	Au	14°b/c
PONTIAC Star Chief (Safari)	16	26-33	19-23	33-38	5°b/c	VD	10°@3600	8°@13½"	N53	RP	7008696	4-5	4-5	O	O	M
PONTIAC Star Chief	16	26-33	19-23	33-38	5°b/c	VD	10°@3600	8°@13½"	N53	RP	7007900	4-5	4-5	O	O	M
STUDEBAKER																
WILLYS																

ABBREVIATIONS

1.—Dynaflow 30°b/c.
 2.—Powerglide 14°@1750.
 3.—Powerglide 26½°b/c.
 a.—Fairlane 13½°@2.8".
 Au.—Automatic.
 b.—Automatic transmission 8°b/c.
 B&B.—Bal. & Bal.

b/c.—Before top center.
 Ca.—Carter.
 CP.—Crankshaft pulley.
 FW.—Flywheel.
 Ho.—Holley.
 M.—Std. Trans. 22°b/c; Auto. Trans. 27°b/c.
 N.—Negative.

NA.—Not announced.
 Q.—Usage not recommended.
 RP.—Recheater Products.
 St.—Stromberg.
 tc.—Top center.
 VD.—Vibration damper.

TAKE THESE TIPS FROM WHEEL ALIGNMENT EXPERTS...

when checking coil springs, look for **COIL CLASH**

The experts look for shiny and worn places on coils where they have been rubbed together under pressure. This indicates "Coil Clash"... a sure sign that the coil spring needs replacement.

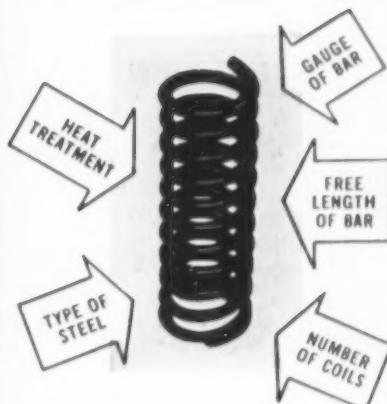


INSPECT FOR "COIL CLASH" every time you are under a car. Point out how worn coil springs affect safety and comfort—and your customers will appreciate your interest.

2

when replacing coil springs, insist on **MOOG**

The experts specify Moog Coil Springs because they are designed specially for the replacement market...with extra durability and "ride-ability" provided by a Built-in Overload Factor that protects overstressed suspension parts in older vehicles.



DESIGN DOES IT! The life of a spring, its ability to carry the car at the right height, and smoothness of ride depend on all these factors—each carefully controlled in Moog Coil Springs.



GHQ for Chassis
and Suspension Parts

MOOG INDUSTRIES, INC.

ST. LOUIS 14, MO.

Car-Washing Machine

(Continued from page 36)

sales on Saturdays because customers could not wait their turn when only two stalls were going. We found the perfect answer in an automatic. It's called into service when we need it, and is out of the way when we don't.

Modern equipment is a mighty good sight to customers, too. They are justified when they frown on the bucket-and-hose type of job. It is horse-and-buggy pace and

inefficiency.

Good wash personnel are vital, and I like them to feel appreciated and rewarded. So on rainy or slow days I give them a break by letting one of them draw an afternoon off with pay. They don't mind then sticking around for another half hour Saturday evenings to finish up a couple of wash jobs.

Eight hundred dollars for a wash machine may look like an awfully big investment to a gas station. But it's really a trifle when you've learned to make car washing pay.

For car washing is one way of making profitable sales, multiplying sales and pulling in new and steady customers.

We Used Incentives

(Continued from page 34)

need for special attention to them when we took over.

Pinning responsibility now through our installation of a filing system upon the mechanic who worked on the customer's car, we have him redo a job on his own time.

We make no unreasonable promises. A car promised for 5 p.m. is ready at 5 p.m. These services plus the incentive pay plan will push our figures beyond the \$350,000 annual service volume we now have.

We also solicited commercial accounts when we came in here—department stores, coal and fuel oil, plumbing companies, fleet operators—by personal contact and telephone, and met with excellent response. By extending our shop hours to midnight with an extra shift of men, we do not tie up any commercial vehicle during a workday.

We talk from experience: An incentive pay plan releases in highly skilled mechanics a work potential that shoots volume beyond unprecedented goals.

Young Ford Dealers Elect Oklahoman

GRADUATES of the Ford Merchandising School from seven Southern and Southwestern states last month elected Brooks Hall of Oklahoma City president of their alumni organization for 1956.

The election concluded a three-day reunion of the young Ford dealer group at the Shamrock-Hilton Hotel at Houston.

Other officers elected were B. A. Fortier, Jr., of Abbeville, La., vice-president, and Ted P. Holcomb, Jr., Duncan, Okla., secretary-treasurer.

Three Southerners Sign Chrysler Franchises

CHRYSLER Division of Chrysler Corp. has signed dealer agreements with three Southerners, it was announced by E. M. Braden, general sales manager.

They are: Ross Hopkins Motors, Carthage, Texas; Campbell Motor Co., Tiptonville, Tenn., and Post Motor Co., Marshall, Texas.



BEST for TUBE and TUBELESS TIRE REPAIRS



"Sizzle" Patches with FILLER TABS

It's easy and convenient to "plug the hole" with Filler Tabs (patented).



VULCANIZING CLAMPS

Portable and stationary shop clamps with the Monkey Grip patented MAGNETIC FOOT. Wide opening — Easier handling — Faster patch positioning.



Write for free copy of TUBELESS TIRE REPAIR BULLETIN — Fully illustrated, easy to follow "how-to-do" instructions.



Don't miss any profits! Ask for information about the complete Monkey Grip line of "World's Best" Tire and Tube Repair materials and other Automotive rubber products.

MONKEY GRIP SALES CO.

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Stocking's up!

This is the way we thank you
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to use Factory Engineered innards
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We are stocking up to supply you
more completely than ever before —
with chassis, body and engine parts
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Thanks again — and Happy Holidays!

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OVER ONE MILLION WATER PUMPS WILL BE SOLD THIS WINTER!



FREE "WINTER CHECK"
WINDOW SIGN BRINGS
IN CUSTOMERS! Ask
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or write direct.



Every Time You Make a Winter Check-Up . . .

Check the Water Pump!

MORE THAN A MILLION Water Pumps are sold during the winter months! The reason is obvious—a worn or defective pump means poor circulation and increased danger of freeze-ups. So be sure to inspect the Water Pump on every Winter Check-Up, and convert many of them into profitable "big-ticket" sales!



Install a new
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with exclusive
NYLON Bearing Retainer

Tough . . . Resilient . . . Indestructible
—delivers thousands of extra miles
of trouble-free performance!



Order from your Independent
Jobber — Guardian of
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AIRTEX AUTOMOTIVE DIVISION

FAIRFIELD, ILLINOIS

IF IT'S AIRTEX . . . IT'S GOT TO BE GOOD!

IF IT'S AIRTEX . . . IT'S GOT TO BE GOOD

Aluminum in Many Colors to Come On Cars Tomorrow, Reynolds Says

ALUMINUM, sparkling in all the colors of the rainbow, will become commonplace on tomorrow's automobiles.

That was the prediction made last month by David P. Reynolds, vice-president in charge of sales, Reynolds Metals Co., speaking to the Detroit Section, Society of Automotive Engineers. He cited as an example a 1956 car (Cadillac) which is featuring a gold-anodized aluminum grille.

"The trend to two-tone and three-tone color schemes," he said, "opens a glowing opportunity for the use of the many attractive new finishes developed in aluminum—natural aluminum in many different textures, color anodized and 'bright' anodized aluminum. Stylists will find a new freedom in handling metallic color with the new transparent lacquers for aluminum."

Predicts Aluminum Roofs

Reynolds predicted a trend to aluminum car roofs, which he called "a neglected part of car styling." He pointed out that there have been several brushed aluminum roofs on special cars in the past two years. In addition to their appearance—the look of sterling silver—they are fadeproof, easily cleaned and the metal is an efficient solar reflector, lowering the car interior's temperature in the summer.

"The use of aluminum actually reduces the total weight of the automobile," Reynolds said, "not just by its own lower replacement poundage, but in the redesigning it makes possible. The use of aluminum makes possible greater efficiency in moving the vehicle, and greater efficiency in stopping it."

"Lighter weight through aluminum increases safety by making possible better braking and a lower center of gravity."

He revealed that the 1956 Cadillac El Dorado uses 192 pounds of aluminum.

"I'd like to point out," he said "particularly since the battle of horsepower is almost equalled by the battle for power-consuming gadgets and extras, that this 192 pounds of aluminum used by one auto maker replaces 400 pounds or more of steel."

He said that since 1950, applica-

tions of aluminum in automobiles have grown from five to 35 items, and that the amount of aluminum used in these applications has been increased four and one-half times.

Calling the automotive industry the aluminum industry's biggest potential customer, Reynolds declared:

"The position of aluminum in the automotive industry is brighter now than any prediction of five years ago."

Ocala Dealers Elect

Ocala (Fla.) Automobile Dealers Association has elected John C. "Jack" Dingman, Dingman Pontiac-Cadillac, as president; James C. "Jimmy" Jones, Ocala Motors (Ford), vice-president, and O. A. "Goat" Lowe, Turnipseed Motor Co., Inc. (Chevrolet), secretary.

Nothing sells like performance ... Nothing performs like COLUMBUS



COLUMBUS Shock Absorbers have been successful in a highly competitive market for one BIG REASON...they excel in performance.

This greater customer satisfaction is a tremendous selling advantage. Capitalize on it by stocking and selling

the world's
2 BEST shock absorbers



Luxury-ride

Velvet-ride

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HECKETHORN MANUFACTURING & SUPPLY CO. • Littleton, Colo.

Readers are invited to contribute to—SHOP TALK—

WHEN YOU CRASH—

The man who should know was telling his Georgia audience from whence you could expect death or injury when you're in a car crash:

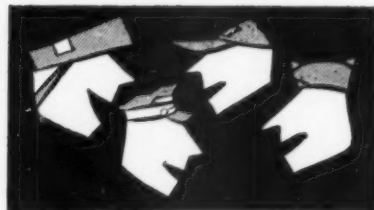
Forty-six per cent of the ejected occupants were killed in motor vehicle crashes;

Twenty-six per cent of the re-

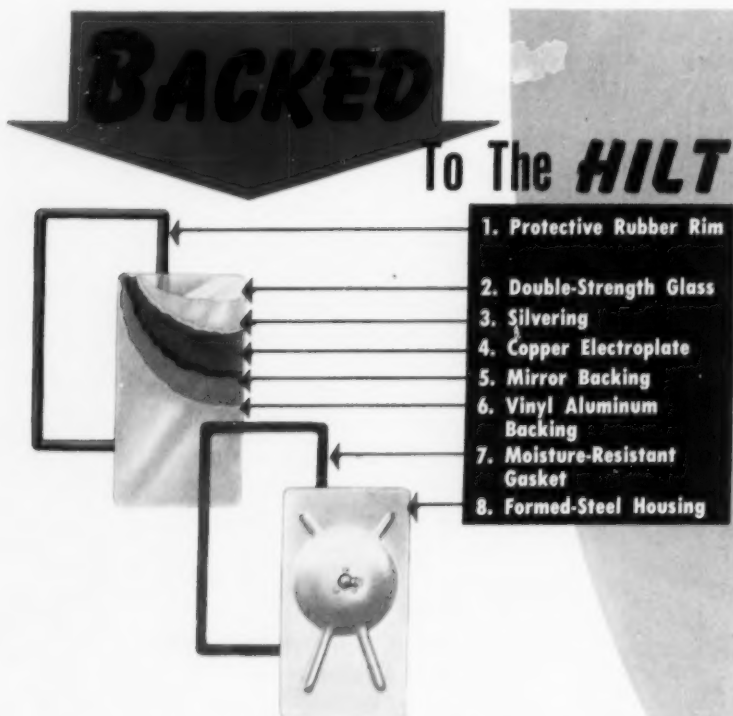
tained occupants were killed (or your chances are about twice as good if you can stick in the car);

Forty per cent of all injured drivers were hurt by the steering wheel assembly;

Thirty-eight per cent of all injured right-front and center-front passengers were hurt by the instrument panel;



A column of informal comments about the automotive trade and its problems.



MIRO-FLEX MIRRORS ARE DETERGENT RESISTANT

Miro-Flex mirrors are made for long-life. Special copper electroplate on back prevents clouding, peeling, flaking of the mirror glass. Laboratory tests prove that the vinyl aluminum backing makes these quality mirrors detergent resistant, 30-1 over ordinary mirror heads. It's another reason why truckers, who look for quality and longevity in mirrors, always ask for Miro-Flex. Simplified package method permits custom mirror assemblies for every truck and purpose from a minimum of inventory.



Miro-Flex is the manufacturer of automotive safety equipment including the original Miro-Flare

THE MIRO-FLEX CO., INC.
1824 EAST SECOND WICHITA, KANSAS

Please send me literature on Miro-Flex mirrors and other automotive safety equipment.

I am a user _____ dealer _____ jobber _____

NAME _____

ADDRESS _____

CITY _____ STATE _____

Four per cent of the injured front-seat passengers were hurt by the rear-view mirror.

That's been uncovered by statistics accumulated by the Indiana state police automobile crash injury research and by Cornell University Medical College's study, according to the speaker, Alex L. Haynes, Ford Motor Co. engineer who has directed Ford's crash injury research program for the past several years.

"A shoulder harness won't do the job because we don't think people will accept it as readily as the seat belt," he said. "Secondly, the rear floor would be all cluttered up with the harness and, thirdly, there is some question as to how good a shoulder harness would be, as it gives some whiplash which may be undesirable.

"At present we think the lap belt is the most practical."

Haynes addressed a meeting of safety officials at Atlanta.

HE REMEMBERS WHEN

How many can remember the "good old days" when it was customary, in order to demonstrate a new car, to take the whole family on a Sunday picnic and teach several members of the family to drive the car?

John T. Robinson of Charleston, S. C., can.

Address any comments to: Southern Automotive Journal, 806 Peachtree St., N.E., Atlanta 5, Ga.

A HYDRAULIC LIFT FOR YOUR PROFITS

PROFITS



"NO-LASH"

HYDRAULIC
VALVE
LIFTERS

Every year the proportion of new cars coming off the lines with hydraulic valve lifters is increasing. It is estimated that there are 112,000,000 hydraulic valve lifters in operation in some 8,000,000 cars. Naturally that means the replacement service business is growing in importance.

It's easy to get set to handle this profitable service business. The "NO-LASH" line, GM-engineered and used as original equipment, covers practically the entire range of installations. Get into this plus-profit phase of modern service with "NO-LASH" Hydraulic Valve Lifters.

AVAILABLE PROMPTLY FROM YOUR REGULAR AC SUPPLIER

DISTRIBUTED BY AC SPARK PLUG DIVISION, FLINT, MICHIGAN
MANUFACTURED BY DIESEL EQUIPMENT DIVISION, GENERAL MOTORS CORPORATION



Robinson, who is associated with W. T. Smith Co., 155 Church Street, remembers when the 1916 Buicks were brought out in the fall of 1915, his firm's sales of that model in one year were 15 cars. They moved about 375 of the 1955 models.

The Smith company, celebrating its 40th anniversary with Buick, started as an agency in 1915 with six employees, one of whom was Robinson.

A 1913 Buick, originally sold to Magistrate George P. Waring at

Midland Park and traded in on a new car for \$100 in 1924, is one of the prize possessions of the company. Smith has been offered many times the \$100 for the four-cylinder model, which has about 25 or 30 horsepower and can barrel along up to 50 miles an hour.

How is your memory?

DANCING DESPITE SHIP

Dancing was more a matter of slopping from one side of the floor

to the other for almost everyone at times aboard the Stockholm last month during the Bermuda convention cruise of the North Carolina Automotive Wholesalers Association.

But observers noticed one man who was gliding gracefully despite the pitching deck. That was Fred H. Eakin, who travels out of Greenville, S. C., for a bearings manufacturer. He ignored the ship's movement and thereby seemed to defy the law of gravity. The secret of this strange phenomenon leaked out when it was learned that some years ago he had been a professional dance instructor.

It's a strange sight, nevertheless, to see one couple gliding while others are plainly groping.

TRAINING COURSES

Bastrop, La.

Gentlemen:

In reference to the article, "Service Station Training Courses Being Offered in Virginia Schools," in the October issue of SOUTHERN AUTOMOTIVE JOURNAL, I would be grateful if you would advise me where I could secure these instruction manuals for my own use.

E. G. SIMPSON,
Route #2

We have forwarded your request to LeRoy Schneider, Schneider Oil Co., Roanoke, Va., for routing to the proper official. If you do not hear from him soon, you may want to write Virginia Polytechnic Institute, Blacksburg, Va.

TAMPA DEALERS CHIP IN

The kids were the winners in the Tampa Independent Automobile Dealers Association's celebration of Used Car Week, according to J. E. Mims, president.

A benefit auction of about 100 used cars was staged on the Kinney parking lot on the old courthouse square. The cars were donated by the dealers in the association. Proceeds from the auction are to be used to refurbish a dormitory at the Hillsborough (Tampa) County Children's Home.

Last year a similar auction brought in \$2,500 which was used to completely modernize the kitchen at the home.

A parade complete with streamer-decorated cars and a high school band alerted the township to the occasion.

Tempo Auto Touch-up

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Put this colorful new display on your counter and watch 'em stop and buy. Dealers themselves have found it the best way for touch-up work and new car conditioning right in their own shop without resorting to messy and expensive equipment. The colors are factory-matched and dry in minutes.

Tempo is available for Ford '54-'55-'56, Chevrolet '53-'54-'55-'56,

Plymouth '55-'56, Buick '55-'56 and Olds '55-'56 as well as Primer, Leveler, Appliance White, Chrome-Sheen Aluminum and Ignition Protector.

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Tempo Instant Spray also available in a complete line of Factory-Approved outboard motor colors and marine finishes.

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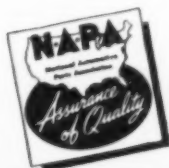
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TOOLS FOR
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Isn't your worth



You can depend upon **WAGNER QUALITY**
because Wagner Products are used as original equipment
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name in brake service*

LOCKHEED HYDRAULIC BRAKE PARTS and FLUID... *WuNo*... *CoMoX* BRAKE LINING... AIR BRAKES... TACHOGRAPHS... ELECTRIC MOTORS

customer's life Two Cents?

SAFE BRAKES SAVE LIVES

for safer brakes . . . repair with **Wagner[®] Lockheed BRAKE PARTS**

Why gamble on "off-brand" parts of inferior quality—even though they may cost you a few pennies less? Isn't your customer's life worth two cents?

In most instances, the cost of parts required in servicing brakes is very little as compared with the importance of safe, dependable performance of brake systems. **SAFE BRAKES** save lives, and you and your customers both gain when you use genuine Wagner Lockheed Brake Parts when servicing any make of hydraulic brake.

These repair and replacement brake cylinders, cups, boots, pistons, springs, hose, and washers are manufactured to the same specifications as parts used in

complete assemblies for original equipment. This assures perfect fit . . . quick, easy replacement . . . maximum service life.

The Wagner Lockheed line of hydraulic brake parts is the most complete on the market and includes hard-to-find numbers not easily obtainable elsewhere. Every make and model of vehicle is covered. Parts are available individually or in factory sealed kits. Cylinders are supplied in complete assemblies or parts may be purchased separately. All items are available from one convenient source—your nearest Wagner jobber. He can also supply you with Wagner Lockheed Brake Fluid and CoMaX Brake Lining. See him today!

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Fill out and mail coupon for full facts on this profitable program that's sweeping the country. No obligation.

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FIRM NAME _____
ADDRESS _____
CITY _____ ZONE _____ STATE _____



Dear Bill,

Right you are, Bill. Knucklebusters as a whole are getting the opportunity for more training on servicing new units and assemblies than any time I can remember. Independents as well as dealer mechanics have to brush their hair and take off for the nearest classroom to get a lecture and possibly some experience in the servicing of carburetors, electrical and ignition and tune-up, transmission or steering, as the case may be, these days.



Jarrett's Wite-Wall

When the Jarrett company introduced Jarrett's Wite-Wall in 1949, they eliminated the back-breaking rubbing and scrubbing of white wall tires and, for the first time, made it possible to get gleaming white tires at a cost of one cent a tire and one minute's work. Since then, Jarrett's Wite-Wall has often been imitated, but no imitator has yet discovered the secret which makes it stand out above all others. Test it for yourself on your own wash rack. In pints, gallons, and drums.

Jarrett's Spra-Wite

Just spray it on and rinse it off. Every white wall owner will want a bottle to keep his tires spick-and-span between wash jobs.

Get Acquainted with Jarrett's Car Appearance Products

Wite-Wall	Kolor-Nu	De Greasol
Spra-Wite	Super Car Wash	Kwik
Tire-Brite	Super Duper Car Wash	Plasto
D-Ice	Fast Suds	Golden Concrete Cleaner
	Fresh An' Clean	

*We know that General Forrest used better English.



Write for information, prices, and the name of your nearest Jarrett Jobber.

Satisfaction Given - Not Promised
CECIL H. JARRETT COMPANY, INC.

MANUFACTURERS OF CAR APPEARANCE PRODUCTS • NEWTON, N. C.

Last month I saw a group of mechanics at a jobber store getting a preview of the new cars on the '56-model cars, some time before the cars were announced. This, after they had been grounded on the service problems of the current and older models which they might encounter.

There have been several automatic transmission schools held here under various auspices, and tune-up and alignment classes have had a good turnout. You could also find that a few of the boys have taken one- to three-week courses at nearby training centers where they got specialized training away from home.

If you ask me (and you did), I think this opportunity for training is the best thing that ever happened to the industry. I think that the car manufacturers are aware that when a job is loused on a car of their make, they are as likely as not to suffer through the customer blaming the car instead of his mechanic. They and other parts, tool and equipment manufacturers benefit, since the wider field means greater sales to their mechanic-customers, so their training money is well invested.

But from our standpoint, as mechanics, we benefit the most of all. Simply by missing a few television programs in the evening of the meeting we get the data on the jobs we do which lets us do them faster and better, or perhaps add new lines that we couldn't do before to fill in the flat spots. Training is absolutely necessary on a lot of this new stuff if you want to service it at all. You can no longer pull it apart and then figure out just what the engineer had in mind when he designed it.

And then, mechanics as a whole lose "face" when a ham-handed individual sticks his cottonpicking fingers in a unit he doesn't know from sausage, and sends his cus-

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108 TESTS ASSURE QUALITY

Some types of our bearings get as many as 108 different inspections. These include visual, mechanical and special inspections, including analyses and temperature controls. Others may require only half that many tests to assure top quality. But, regardless of the bearing or bearing part you need, you can be sure of this:

If it comes to you in the red-and-black Federal-Mogul box, it's tops in quality and accuracy for the job it has to do!

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FEDERAL-MOGUL SERVICE

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tomer out raging about incompetent mechanics as a group. After one of these classes the mechanic either decides to set up to do this work, or he learns enough about it to know he'd better leave it alone.

If you don't think they've learned something, you just want to take a look at some of our boys who have added tune-up, radio, air conditioning, power steering, automatic transmission and a few other skills to their regular mechanical line. They're good at them, too, and they didn't learn

them by ear—believe me, they attended classes.

Can you believe that it's reindeer-sled-pulling time again? It all goes to remind me that there's a lot of us getting old now!

Don't tell me what you want for Christmas, Bill, tell your wife, but try and tell her before she gives you the hint for hers. (Hope you get the rifle with the telescope sight, anyway.)

Yrs,
Ed.

Outlook for Atomic Cars

(Continued from page 31)

tirely new to this industry.

1. A means must be found to convert the heat released by fission of the atoms into usable power. In most designs for electric power reactors, steam is used to drive a modified version of a conventional turbine generator. Usually there is a heat exchanger between the reactor and the turbine so that the steam used to turn the turbine is not radioactive. In such applications the coolant from the core of the reactor serves two purposes: it prevents overheating of the reactor and also transfers heat to water in the heat exchanger, turning it into steam. In some cases the coolant for the core of the reactor is water, which becomes radioactive. Liquid sodium has also been used as a coolant.

Major Problem Is Unsolved

One type of reactor uses a uranium solution as fuel, rather than solid uranium. Since the fuel can be circulated as a coolant in this case, some design modifications are possible. But the major problem for the automotive field is not solved.

Even if the reactor itself fits neatly under the hood, how about the secondary stage to put the heat into a form to drive the wheels? Will a steam plant be the answer? Or some form of turbine using heated air? The problem is not an easy one, considering the space limitations.

2. Atomic fuel is not cheap and neither is the fabrication of a reactor. Materials that will not break down under intense radiation must be used to contain the core of the reactor, and special care must be taken to prevent leaks in the circulating system for a radioactive liquid, whether the liquid is fuel or coolant.

Figures on the cost of the fuel itself are difficult to determine since the type and amount of fuel vary with reactor design. During the Atoms for Peace conference in Geneva last summer, an American industrialist gave some estimates of the possible cost of producing electricity with nuclear reactors. His estimates were based on a price for enriched uranium of \$15 to \$30 a gram. Fuel elements and control rods for the Army reactor will cost an estimated \$140,000.

At present there is no way to tell exactly what the fuel for an auto-

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MODEL 4200 ZIP-O

BRAKE BLEEDER

BLEED BRAKES—THE EASY WAY

- ONE MAN OPERATION — Fast — Handy — Modern — Clean
- Use indoors — Use outdoors. Connection to tire provides constant correct pressure.
- Air can't get into fluid due to special diaphragm design. Never any fluid loss.
- Make brake bleeding a profitable operation with an Ammco Zip-O.

only \$2450



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BRAKE GRAPH

SELL BRAKE SERVICE — THE EASY WAY

- Record braking efficiency under operating conditions.
- Build customer confidence — Records stopping distance — Tells which wheel grabs or pulls.
- Speed service work — Simple and fast in operation — Sets on floor of car.

only \$2450



*T.M.

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GET THEM FROM YOUR AMMCO JOBBER

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eye appeal!
New, dis-
tinctive can
... in gold,
red and blue.

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NEW HAVOLINE SPECIAL 10W-30 is an all-temperature motor oil that thinks for itself. It's "light" for quick starts, has "body" to withstand engine heat. Guards against wear, exceeds "mil sup one" specification — most rigorous standard devised for automotive oils.



NEW HAVOLINE SPECIAL 10W-30 has a big following ... is getting more regular customers constantly ... means bigger unit sales ... repeat business ... better profits. Backed by advertising in the national magazines and on TV, HAVOLINE 10W-30 means extra business!



Tests prove pickup of even **NEW** cars can be increased!

Tested against leading 10W-30 oils in road trials by an independent research organization, Havoline Special 10W-30 proved decisively best for today's high compression engines.

After 15,000 miles of grueling tests, pickup and pep of new cars using Havoline Special 10W-30 actually increased up to 15 per cent

... as much as 18 per cent greater than test cars using other 10W-30 oils. Oil and gasoline consumption dropped. Wear was negligible.

Havoline Special 10W-30 keeps engines clean, fully protected despite temperature changes, assures livelier starts, more engine stamina.

THE TEXAS COMPANY



motive reactor would cost, but the cost per pound probably would be fairly high. In general and within certain limits, the amount of uranium necessary for a chain reaction can be decreased as the percentage of U^{235} in the uranium fuel is increased. At the time Fermi constructed his first reactor no uranium highly enriched in U^{235} was available—which is a primary reason so many pounds were required to achieve a chain reaction. Since normal uranium metal, after the ore is refined, contains only about 0.7 per cent U^{235} , it is easy

to see why the cost of enriching nuclear fuel is high. Not only is the amount of U^{235} small, but also the process of separating it is difficult. A reactor designed to fit in a car would undoubtedly require highly enriched fuel.

3. Safety precautions that can add to both the size and the cost of reactors are necessary. The amount of shielding required to protect people from radiation varies with the material used and the type of reactor, but no adequate system in use at present could be placed between the "works" of a

reactor and the body of a conventional car—even forgetting the power conversion unit for a moment. The weight of the shielding material is another factor to be considered.

Reactors in use today have special instruments to measure the rate of the reaction and the amount of radiation, plus devices that will stop the reaction automatically if it reaches a dangerous level. The cost of these devices and the space required for them are relatively small for an electric generating plant, but they would be relatively large for an automobile.

Some research assemblies, such as the bare uranium sphere at Los Alamos, are operated from a distance by remote control. But obviously this safety technique is not suitable for automotive reactors.

Special Headaches Are Involved

4. Many specialized problems may arise if the major problems are solved and an atomic car is built. Will it have the acceleration and flexibility modern drivers demand? Will it be efficient for stop-and-go traffic as well as for highway driving? Will it provide engine braking when needed, or will the brake problem have been solved by then anyway?

A reactor that will withstand the bumps and vibration of ordinary driving can undoubtedly be built. But how can contamination by radioactive products be prevented when a car hits a telephone pole at 65 miles an hour?

How can adequate service facilities be supplied? Can mechanics be trained to handle ordinary maintenance? And if not, will specialists be available in more remote areas?

It is not hard to see why nuclear power has been applied to other areas before reaching the automotive field. The size and especially the cost limitations are not nearly as stringent for submarines and airplanes. And neither has fuel capacity restricted the range of cars, as it has air and underwater vehicles. The service problem for planes and subs is in an entirely different category too.

What do the "experts," the atomic scientists themselves, think about prospects for nuclear-powered cars? It is not easy to find out. Most of the scientists have not taken time to relate progress in atomic research to automotive possibilities. Some atomic developments cannot be discussed because

ST. CLAIR RED TRIM CEMENT

"That Old Red Gook"

the Car Manufacturers Standby

for over
30 Yrs.



USED IN MILLIONS OF CARS

St. Clair Cements come packed in Gallons, Quarts, Pints, 5½ oz. tubes and ½ Pint Cans with Special Dispenser gun.

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St. Clair trim cements provide a stronger, more permanent bond between fabric and metal, wood and painted surfaces.

Write for samples — prices.

ST. CLAIR WEATHERSTRIP CEMENT

Is used for bonding weatherstrips to doors, windows and windshields. It is the same cement used in millions of cars, by car manufacturers.

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CLAIR Trim & Runner CARPET

Manufactured by the St. Clair Rubber Co. Carpet-like Rubber material. All purpose for Trim, Runners, etc. . . . 36" width. Colors—Black, taupe, blue on gray, maroon on gray, green on gray.

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Chemically strengthened fibres — washable — stitched sheepwool tufts — heavy canvas back — heavy duty — long wearing — economical.

Write for Catalog sheets — Prices.

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6 sheets, 27" x 68" packed in cylinder carton. Colors—Black, taupe, blue on gray, maroon on gray, green on gray.

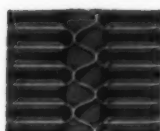
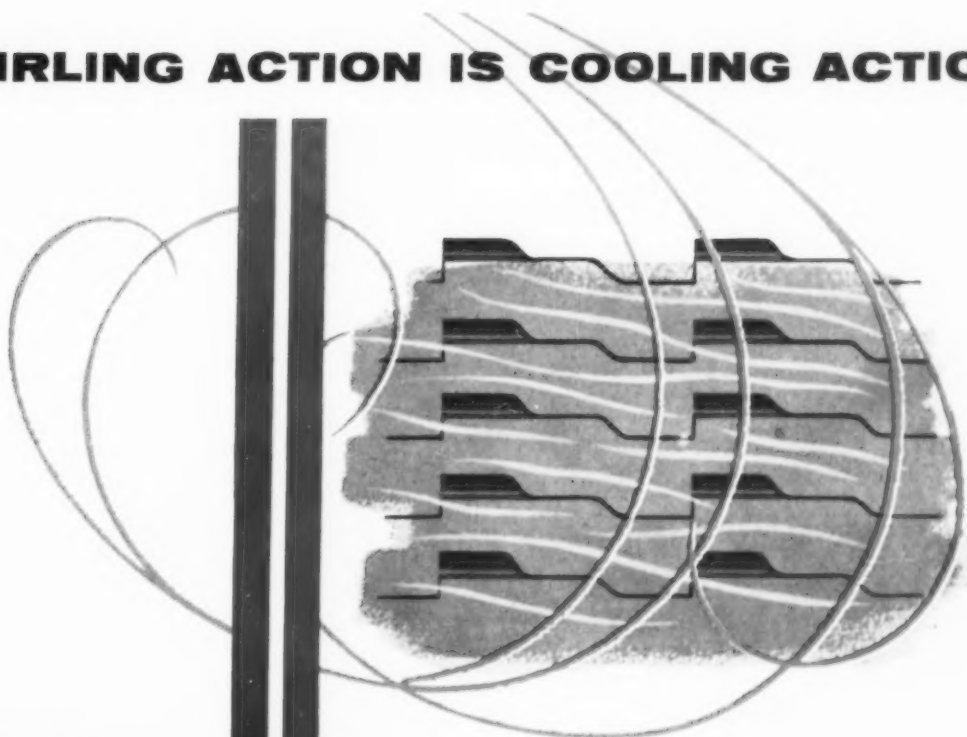


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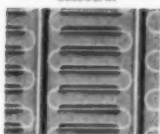
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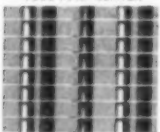
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Only Harrison Cores Feature "Whirl-Cool" Design

Only Harrison cellular and tube-and-center cores have this exclusive "Whirl-Cool" feature—*louvered air cells!* Scientifically designed by Harrison research engineers, these louvers create far greater air turbulence for far more effective cooling action. You'll find, too, that Harrison's vast experience in the design and manufacture of radiators—more than 61,000,000 since 1911—is your assurance of rugged dependability . . . consistent customer satisfaction. What's more, Harrison cores are easily available everywhere. Nation-wide distribution by United Motors Service puts a well-stocked UMS distributor or branch warehouse near you. Call today. You'll find that it's smarter than ever to replace with a Harrison core!



TEMPERATURES
MADE
TO
ORDER

HARRISON

RADIATOR DIVISION, GENERAL MOTORS CORPORATION, LOCKPORT, N. Y.

of the need to protect information related to national defense. Also, scientists in general are not as ready to make statements as the men who build and sell cars.

But finally a scientist who is also a sports-car enthusiast was cornered and asked the question. He answered with conviction: "Someday there will be nuclear-powered cars." How soon is "someday"? But sometimes atomic scientists, like other people, reveal thoughts by their actions, not their words. In his hand was a current news magazine, opened to an ad for

the Continental Mark II.

Consider these facts: The odometer on the scientist's new American-built sports car reads less than 2,500, so his next trading date probably is about two years away. He will want the most distinctive model on the market at that time. And thoughts of a conventional engine, not a nuclear job, are bringing that unmistakable gleam to his eye.

From any viewpoint, it seems a safe bet that the Nuclear New-Flite won't be on the market for a couple of years!

Less Human Element

(Continued from page 35)

ther consideration are taken to engineering, styling, cost accounting, manufacturing and sales for expert appraisals of all the factors involved in building them into the product on the final assembly line.

There is a product planning coordinator for each of the corporation's lines of cars — Studebaker, Packard and Clipper. Each devotes his time to his line and follows through on specific items considered for it.

With facts in hand, product planning submits recommendations to the product committee, which makes all final decisions. The members of this committee include the president of the corporation, James J. Nance, division general managers and key department heads. The chairman of this group is the head of the product planning department.

It Has to Sell Hard

Bremer admits occasions when the product planning department has to sell hard. However, he emphasizes, Studebaker-Packard is a company dedicated to innovation, and the product planning department invariably finds products committee members enthusiastic over the prospects of a new feature or design.

When the new idea or design has been adopted for incorporation into the product, target dates are set and these dates become the responsibility of many departments. However, it is the responsibility of the product planning department to coordinate the timing and follow-up from the start of development in engineering through tools and dies and into production.

Bremer explains that the great advantage of this kind of a product planning activity is that it gives a smaller company the opportunity to take full advantage of the mobility and flexibility inherent in its size.

The public generally, Bremer believes, is of the opinion that major automotive developments are many, many years in the process of being considered, debated adopted, engineered and, finally, getting to the public in the product.

However, he says, with the emergence of a full-line company the size of Studebaker-Packard, a revolutionary change in product planning philosophy is being pioneered. Taking torsion bar suspension, electric push-button driv-

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Speed up with Silver Beauty solderless terminals

133
RING TONGUE TERMINALS
DOLLAR BOX
Silver Beauty SOLDERLESS TERMINALS

WIRE DIA. — 12-14
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WIRE DIA. — 12-14

Silver Beauty

The combination of Silver Beauty solid copper solderless terminals and the new Silver Beauty combination crimping tool makes fast work of wire servicing. Be sure of far better connections that won't break off, shake off, or corrode. Double flat crimp locks wire much tighter with uniform pressure, without piercing or breaking terminal. Non-directional crimping action locks perfectly every time. Types and sizes for all ignition and primary wiring needs.

Easiest tool to use. Cuts and strips wire, crimps terminals to 7mm. Big, comfortable, unbreakable plastic handle bonded to high-grade tempered steel.

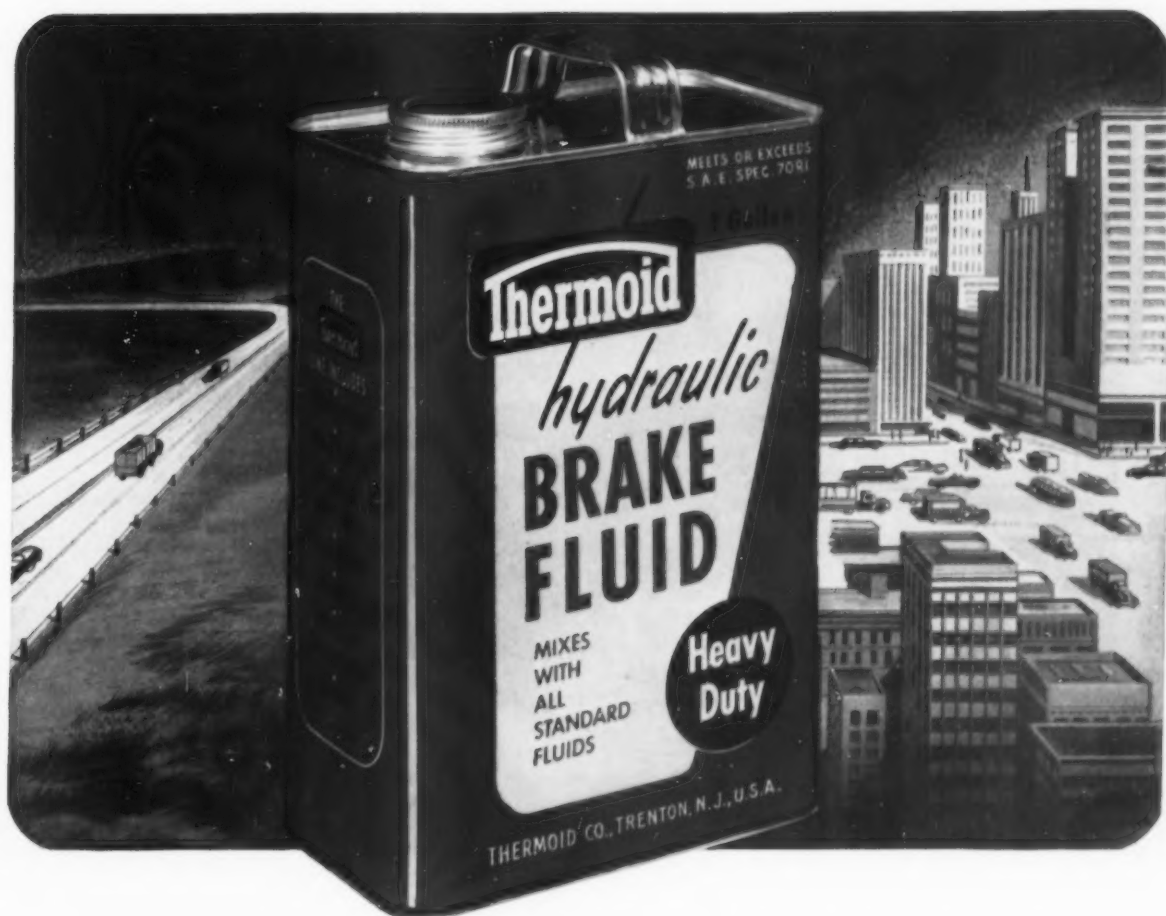


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J. S. Connell Company, 2816 Commerce St., Dallas 1, Texas

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... life blood for overworked brakes!

Sudden stops in congested traffic . . . panic stops at expressway speeds . . . constant braking on steep down-grades . . . these driving conditions, combined with greater power and automatic transmissions, demand better brake fluid! Stop using moderate duty—use only heavy duty fluid.

Thermoid Heavy Duty Hydraulic Brake Fluid withstands the toughest conditions . . . exceeds all SAE requirements for Heavy Duty Fluids. It's the ultimate in protection for both cars and trucks.



Thermoid Custom-Built Brake Lining and Hydraulic Brake Parts



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the standard of precision processing in brake lining, brake blocks, hydraulic fluid, cylinder assemblies, hydraulic brake parts



Charles E. Kennard, extreme left, manager, addresses a recent dealer meeting held by Coiner Parts Co., Staunton, Va., in conjunction with a National Carbon Co. sales clinic on anti-freeze. Attendance approximated 400 persons from the Virginias. Two vaudeville acts, one from Boston and one from New York, were staged. Among National Carbon men on hand were J. H. Pinkham, Walter Reed, W. R. Warren and Ken Wilkerson.

HYDRAULIC VALVE TREATMENT

For Top Engine Performance



CORRECTS!

- Frees hydraulic valve lifters
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- Dissolves engine sludge and varnish
- Increases power and gas mileage



MAINTAINS!

- Keeps valves and lifters free
- Cools as it lubricates
- Protects engine parts
- Increases the life of your car

DO YOUR CUSTOMER A FAVOR! TELL HIM ABOUT THIS EASY Two-Step Treatment — He'll show his appreciation in repeat business!

Order from your jobber, or write to Dept. 172

EMEROL MANUFACTURING CO., INC.

242 WEST 69TH STREET, NEW YORK 23, N. Y.

ing controls and the non-slip differential — three industry "firsts" on 1956 Packard models — as examples, Bremer points out that product advances in basic automotive design are now being launched literally years in advance of the time they otherwise would reach the public.

Packard torsion bar suspension completely eliminates the front coil and rear leaf springs that have represented the industry's standard of suspension for more than two decades.

For the foreseeable future, Bremer says, Studebaker-Packard will continue to devote its efforts to preventive safety. He believes that the only way to make the nation's highways completely safe is to eliminate the human element from motor-car operation.

"For 1956, with electric push-button driving, the industry makes a dramatic move in this direction," Bremer says. "Every accident may be attributed to driver error and the ultimate goal of our company is to make operation of the automobile error-proof."

Bremer is inclined to ridicule those pessimists who believe that elimination of the human element from motor-car operation is beyond the horizon, far in the future.

"Such thinking," he says, "completely ignores the mobility and flexibility that characterize the postwar philosophy of automotive product planning."

Continental Is Atlanta Topic

Jesse W. Richards was guest speaker at the November 7 meeting of the Atlanta Section of the Society of Automotive Engineers. His subject was "The Continental." Richards has been associated with Ford Motor Co. since 1938 except for a five-year period spent with Kaiser-Frazer Corp. Elmer E. Sanborn, National Carbon Co., is chairman of the Atlanta Section.

When you're
trying to
find
the
trouble...



Get this useful BCA Trouble Shooter's Guide. Ask your BCA—Federal-Mogul jobber for a copy. Or write us. It's free.

CHECK THE BEARINGS, TOO

Hear a funny clicking, grinding noise in the generator? Frequently, you'll find a worn or dry generator bearing is to blame.

This new BCA Trouble Shooter's Guide helps trace many hard-to-locate generator, wheel, transmission, differential, and clutch troubles to worn or defective bearings. Helps you win and hold customers.

THE RIGHT AUTOMOTIVE REPLACEMENT BEARINGS ARE EASIER TO INSTALL

BCA ball bearings are designed for automotive replacement service. They're not nearly right—they're exactly right. And your BCA—Federal-Mogul jobber knows automotive bearings—knows your problems—speaks your language.



Product

Federal-Mogul Service
(Division of Federal-Mogul Bower Bearings, Inc.)
DETROIT 13, MICHIGAN



Garagemen's Stake

(Continued from page 37)

confidence in you and encourages them to come back again and again. . . .

Another sure-fire way to increase your service sales is to organize and operate a thorough car-inspection system so no important need of any car owner who comes to your shop ever is overlooked. This is a real service to your customers, and a safety check. They appreciate it, and you

get extra business. Keep in mind that one out of four batteries, for example, needs a recharge, one of ten needs replacement on today's market.

But, for goodness sake, don't overlook the desirability of incentives for the people in your shop who are supposed to help you in your drive for sales.

We keep telling the boys they should check the oil, the battery, the compression, the oil filter, fan belt, spark plugs, battery cable — we talk, talk, talk on the profit

to be made by checking and inspecting.

Well, there is profit to be made, but talk is cheap. Cut the boys in on some of the profit and watch results.

Finally, in your drive for sales, you should *advertise*. Invite car owners to your shop by advertising.

All of you, I am sure, will agree that experienced operators almost always are the *best*, the most efficient, the most dependable. And you know what? Most of you men are inexperienced in the matter of advertising to promote service sales!

And you know what, further? Among eight or more phases of inexperience which accounted for 90.7% of all business failures in the first part of this year, inadequate sales accounted for 49.7% — inadequate sales due to inexperience or lack of knowledge of how to make sales.

How to Get Experience

Now you know, just as well as I do, how you get experience. You get it by *doing*. The trouble has been, you haven't been *doing* much advertising and sales promoting, so you haven't gotten the experience.

The answer to this problem of yours, it seems to me, is obvious. Start doing *some* advertising—and start doing this now. Nobody would expect an inexperienced operator to tackle the whole ball of wax at one time, anymore than you'd expect a learner to jump into the deep end of the swimming pool. You'd be over your head in no time.

That probably is one of the biggest mistakes which your suppliers and some of your associations have made in their efforts to help you do an advertising job in your own community. They have overwhelmed you and confused you with too much and too complicated advertising programs. . . .

I think two of the simplest, most fundamental and most effective things for a business like yours are point-of-sale signs or posters put up at your shop, and messages sent by mail to car owners. That's a start, and if everybody did it, it would be a good start. . . .

One repairman met another out on Williamson Road. After passing the time of day, one said to the other:

"I can't understand why you failed in business."

"Too much advertising!"

Safer by a Long Sight...

GROTE CLASS 'A' DIRECTIONAL SIGNAL LAMPS

All Grote Directional Signal Lamps are approved as Class A, Type I, where required. Specially designed plastic 4" lens will not fade or distort... lens shines extra bright regardless of mounting position. Baked black enameled body is heavy gauge rust-proofed steel. Stainless steel door with snug gasket seals out dust, moisture. Single screw fastening on door for easy bulb replacement. Available in 14 complete signal set combinations with manual or self-cancelling switches.

Insist on GROTE Lamps.
See your Jobber today, or write for catalog and prices.



Lamps • Directional Signals • Reflectors • Flares • Mirrors

Distributed throughout the U. S. and Canada

THE GROTE MANUFACTURING CO., INC., Bellevue, Ky. • Opposite Cincinnati



No. 404

Double face, amber and red. Lamp Body designed to eliminate daylight glare. 21 c.p. single bulb. Pedestal mount.

No. 401


Single face, pedestal mount.

No. 402

Single face, semi-flush, stud mount.

No. 406

Single face, flush mount.



Only **VITALIC** Gives You
These Three Things
You Want Most in a Battery

QUALITY. Vitalic's complete line of automotive, truck, bus, diesel and marine batteries are engineered to retard corrosion and provide maximum power production per square inch. In 6, 8 or 12 volts, wet or dry charged, no other line of batteries offers so much.

PRICE. Vitalic Batteries are manufactured by the South's largest battery manufacturer. Volume production permits prices that your toughest competitor can't touch.

SERVICE. Vitalic's factory-trained sales organization and unique system of quick delivery directly to your door by factory trucks give you money-saving service that can't be matched.

Call or write today for complete details on how Vitalic can give you the things you want most in a battery.

VITALIC

Batteries

Vitalic Battery Company • 2040 Amelia • Dallas, Texas

Manufactured by the South's Largest
Independent Battery Manufacturer

"What do you mean — too much advertising. You never spent a cent in your life on advertising."

"That's true, but my competitors did."

So, let's go a step beyond my opening remark. Don't just think of yourself as a "merchant." Be a merchant in fact. Sell your services. Actively promote your business as an independent businessman by

1.—Making yourself and your employees personal salesmen and ambassadors of good-will for your

business.

2.—Making your place of business the kind that encourages customers to come back again and again, as to location, appearance, equipment and identity.

3.—Operate an organized car-inspection system.

4.—Provide incentives for employees who make sales for you.

5.—Advertise, simply but consistently — using especially the point-of-sale signs and the direct-mail material which are available from so many of your suppliers at

little or no cost involved to you.

If you don't tell 'em, you can't sell 'em!

Five-Stall Shop

(Continued from page 32)

area we call the toolroom and workroom because it is cut off from general repairs going on around us. In this section we have a steam cleaner, a pit for valve refacing, valve fitting, piston pin fitting, brake shoe relining and related repairs. On jobs like these, isolation from the distractions of the general shop permits you to do a more concentrated piece of work.

We like the easy access to the shop, the one-way flow of traffic, the amount of available workspace where no one feels pressed by what is going on around him. We also like the ample office with enough space for files, office machines, a couple of chairs for customers who may want to wait for their cars, and plenty of wall shelving for systematic arrangement of parts inventory.

Every garage has its spot for waste and trash accumulation, and ours is on the left-hand side of the driveway just inside the building. With continued expansion and more available capital, we would like to put that strip of space to better use some time in the future by moving the front doorway clear over to the left.

AAA Asks Emphasis On Safety, Not HP

THE American Automobile Association has stated that horsepower was going beyond the "reasonable reserve power" needed for passing and emergencies and that manufacturers should put less emphasis on power and more on "ways and means of protecting the driver against his own mistakes."

The "higher and higher speed" has made an "unwarranted potential hazard" on the road, the club stated. It has requested manufacturers to "develop and introduce new safety features into the construction of automobiles."

Accident-proof door latches, seat belts and padded dashboards are appearing on some 1956 models; increased horsepower is also being featured.

Tennesseans Pick Gatlinburg

The Tennessee Automotive Association has chosen Gatlinburg on Sept. 30-Oct. 2 for its convention.



STOP

LINING BRAKES THE OLD-FASHIONED WAY...



NEW

Lamson

BRASS

BRAKE LINING BOLTS

Here's the **FAST, SURE** way to attach truck and trailer brake linings without special equipment, right on the spot. Lamson Brake Lining bolts replace rivets and the need for riveting skill and equipment.

The BL-1 package contains 100 #10-24 x 1 screws. The BL-2 package contains 100 1/4-20 x 1 screws. Both packages contain hex steel machine screw nuts, lock washers and special flat washers.

All screws are made of brass to prevent drum scoring.

CONTACT YOUR JOBBER for full information or write:



The LAMSON & SESSIONS Co.

1971 West 85th Street • Cleveland, Ohio

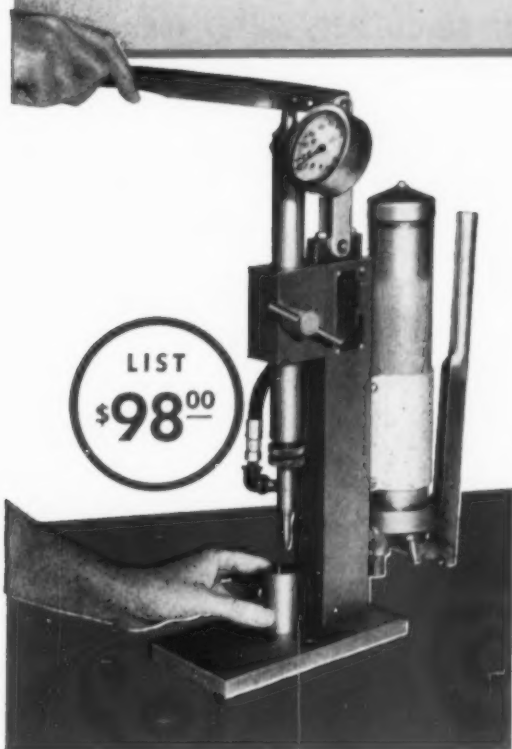
Plants at Cleveland and Kent, Ohio • Chicago • Birmingham



CAP SCREWS MILLED STUDS WHEEL BOLTS SEMI-FINISHED NUTS TAPPING SCREWS

HOLMES *New* SHOP TOOLS

Simplify Job of Servicing HYDRAULIC VALVE LIFTERS



LIST
\$98⁰⁰

HOLMES SERVICER FOR VALVE LIFTERS

- ✓ Removes stuck plungers.
- ✓ Permits Leak-Down Test before Lifters are installed.
- ✓ Provides means of prolonging use of Lifters.
- ✓ Saves time dismantling and reassembling Lifters.

THE HOLMES SERVICER represents many years of research in the development of a new and easier way to service Hydraulic Valve Lifters. Perfection of this new machine not only simplifies what has long been a very tedious job, but actually provides a means of reclaiming lifters that would otherwise be thrown away. The easy removal of stuck plungers from their bodies and simple but accurate leak-down test provided by the Holmes Servicer, prevents the scrapping of useful lifters — assuring replacement with only perfect valve lifters. Results for the shop are a faster job, a handsome profit and confidence in a job well done ... to the customer it means a saving in the purchase of unnecessary new valve lifters and assurance of a factory quality job. It requires but ten or fifteen minutes to check a full set of lifters, giving each an accurate leak-down test before it is put back in service. The Holmes Servicer is a precision tool, greatly needed for rapid, dependable servicing of valve lifters and should be in every shop desiring better profits and customer satisfaction.

HOLMES LIFTER REMOVING TOOL

Here's a new tool that performs one of the shop's most aggravating and time consuming operations — removal of Hydraulic Valve Lifters that are stuck in the cylinder block. Today it is no longer necessary to remove the oil pan and drive the lifters out. Introduction of this tool now permits a mechanic to remove all lifters from the top side of engine. This tool is designed with a tee handle on one end and an internal expanding chuck on the other which can be snapped into the retaining ring groove of the lifter body and locked in place. Lifters are then removed quickly and easily, without distortion or damage. The Holmes Remover for Valve Lifters is truly a much needed tool that every mechanic should have.



LIST
\$9⁰⁰

Order from your jobber . . .



Or Write Factory Direct

ERNEST HOLMES COMPANY

2505 EAST 43RD. STREET

CHATTANOOGA, TENNESSEE

MONROE'S TUNE UP THE RIDE CAMPAIGN

Start today—Cash in on public demand
for smoother, safer rides . . .

INSTALL MONRO-MATIC SHOCK ABSORBERS



Shock sales can double the profits of your hoist. Every time you have a customer's car on the hoist, be sure to check the shocks. An oil-stained shock is a worn, inefficient shock that should be replaced.

Car owners everywhere are demanding smoother, safer riding. Monroe Dealers can cash in on this demand with Monroe's TUNE UP THE RIDE campaign.

Two out of five cars on the road today need shock absorbers replaced. You make up to Fifteen Dollars profit when you replace worn shocks with a set of Monro-Matics—and you build customer goodwill too.

So, start today to ring up those big, easy profits. See your jobber, or write us for full details on Monroe's TUNE UP THE RIDE Campaign.



3-Year Winner of "500"
Monro-Matic Shock Absorbers dramatically prove their worth under the most trying conditions. Winner of first place at Indianapolis Speedway for three years straight, Monro-Matic-equipped cars took first, second and third in the 1955 "500."



National Advertising
Monroe backs dealer's selling efforts with a hard-hitting national advertising campaign, that builds name recognition, product acceptance for Monro-Matic Shock Absorbers. Radio commercials and newspaper mats are furnished free for local use.



Sales Helps, Include display cartons, ride tune-up kit, window and wall posters, wheel cards, mailing cards. Fleet of salesman's cars carry Monro-Matic message to millions on the highways.

30-DAY FREE RIDE PLAN

Get the facts on the industry's most sensational sales-producing plan. Dealers report sales and profits upped as much as 500% by the Monroe 30-day Free Ride Plan.

FREE!

You are invited to a Free showing of "Behind the Scenes at Indianapolis." Ask your jobber for date of showing.

MONROE AUTO EQUIPMENT COMPANY

MONROE, MICHIGAN

World's Largest Maker of Ride Control Products

HELPFUL BOOKLETS FREE!

On this and the following page is an excellent selection of free Automotive literature. List numbers of these desired on the coupon and mail to SOUTHERN AUTOMOTIVE JOURNAL.

101 WRITE FOR CURTIS INTERNAL ASSEMBLY KIT 0-8—Gives full information on Curtis Air Compressors, Curtis Car Washers and Curtis Auto Lifts. Curtis Pneumatic Machinery Division of Curtis Mfg. Co., 1958 Kianon Avenue, St. Louis 20, Mo.

102 MODEL NUMBER INTERCHANGE—Handy reference sheet with complete listing of all passenger cars by model number interchangeably with model name. Saves look-up time by including car model data not found elsewhere. Useful as a supplement to every automotive parts catalog. Rem Mfg. Co., 20-21 Wagaraw Rd., Fair Lawn, N. J.

103 ARROW CATALOG NO. 86—Describing complete line of generators, starter motors and armatures. Complete application data is included in this booklet for all passenger cars, tractor and farm implements, truck, bus and taxi as well as an entirely new section devoted to heavy equipment. . . compressors, cranes, hoists, lift trucks and other industrial applications. Equipment listings include data through 1958. Arrow Armatures Co., Dealer Service Department, P. O. Box 1428, Spartanburg, S. C.

105 WAGNER AIR BRAKE AND ROTARY AIR COMPRESSOR BULLETIN—Discusses in detail straight air and air-over-hydraulic air braking systems. Contains an explanation of the operation of the Wagner Rotary Air Compressor complete with diagrams, cross section drawings, and photographs. Lists by catalog numbers component parts as well as field installation kits. Write for Catalog KU-201, Wagner Electric Corporation, 8888 Plymouth Avenue, St. Louis 14, Missouri.

108 12 VOLT ELECTRICAL EQUIPMENT FOR PASSENGER CARS—A 20 page booklet covering the description, care, maintenance, checks, and servicing of the latest type Delco-Remy 12-volt electrical equipment used on passenger cars. 46 illustrations covering the charging, cranking and ignition circuits, etc. Technical Literature Department, Delco-Remy Division, Anderson, Ind.

109 AMMOO HONING, ENGINE REBUILDING, AND BRAKE SERVICE TOOLS AND EQUIPMENT—Catalogs describing the Ammo Line of Wet and Dry Fin Fitting Honing Machines, Brake Shoe Grinders, Brake Drum Lathes, Brake Shoe Setting Gages, Brake Drum Micrometers, Brake Cylinder Hones, Con-Rod Aligners, Main and Camshaft Bearing Boring Machines, Ridge Reamers, Cylinder Hones, Surfacing Hones, Torque Wrenches, Small Bore Hones, Tappet and Rocker Arm Grinders and other tools. Ammo Tools, Inc., 3110 Commonwealth Ave., North Chicago, Illinois.

111 SELECTION GUIDE OF SPECIALIZED LUBRICATION TOOLS—Set up in chart form covering 19 makes of cars and 8 specialized tools. Especially helpful to inexperienced operator, making it practically impossible to select the wrong gun or accessory for any given operation. Also has chassis drawing pointing out every part named. Form No. 88-666, Alomite Div., Stewart Warner Corp., 1256 Diversey Parkway, Chicago 14, Illinois.

112 MUSTANG ENGINES—Complete catalog on MUSTANG precision-ground engines. Information on regular, plus-power, and high compression models. Information on the MUSTANG guarantee and testing processes. Mustang Division of Rebuilders, Inc., 100 International Rd., Garland, Texas.

119 RAMCO SERVICE MANUAL—5th edition. Illustrated. Gives complete data on piston ring installation—also hints on locating engine trouble—causes of oil

loss—pitfalls of motor-overhauling and how to overcome. Ramsey Corp., 3898 Forest Park Blvd., St. Louis 8, Mo.

120 NEW GRINLEY BOOK—Nine basic steps to extra miles of safe braking. Illustrated charts enable maintenance men to visualize faulty braking conditions and help them in trouble shooting and servicing truck and bus brakes. Grinley Mfg. Co., 700 W. Caroline St., Paulding, Ohio.

121 OIL FILTER MANUAL—Cartridge installation manual emphasizing easier service on late model cars with hard-to-reach filters. Illustrated instructions for cars thru '54, with cross reference chart. Wix Corporation, 1211 Ozark St., Gastonia, N. C.

122 TIRE RETREADING—An illustrated bulletin about this newest extra-profit service. Describes "Bear Balancer" service which makes possible both tire retreading and wheel balancing in practically one operation. Explains method using just one mounting. Bear Mfg. Co., Dept. 8A3, Rock Island, Ill.

124 COMPLETE DIETS CATALOG—Illustrates and describes the Diets complete line of Turn Signals, Clearance Marker Lights, Stop and Tail Lights, Headlights and Spotlights, Mirrors, and other lighting and safety equipment for passenger cars, trucks, buses and tractors. This 20-page, color catalog also shows displays and merchandising aids and is indexed and filing. E. E. Diets Co., 328 Wilkinson St., Syracuse 1, N. Y.

129 AUTOMATIC TRANSMISSION SERVICE TOOLS—Illustrated catalog pages for use of tools for Olds, Cadillac, Pontiac, Lincoln, Nash, Hudson, Kaiser, Frazer, Ford, Mercury and Chevrolet automatic transmissions. The New Britain Machine Co., New Britain, Conn.

130 VALVE CATALOG—A new 160 page catalog of valves, valve guides, valve seats, valve openings and other valve components is offered by Rich Mfg. Corp., Battle Creek, Mich.

132 AUTOMOTIVE SERVICE GUIDE—A practical and factual presentation of the use of impact tools in automotive servicing. Contains time study reports showing how dealers and shops can increase profits

for both themselves and their mechanics. Automotive Service Guides are now available for Ford, Chevrolet, Plymouth, Oldsmobile, Hudson and Studebaker. Specify which Guides you want. John K. Uhler, Ingersoll-Rand Co., Phillipsburg, N. J.

133 CATALOG NO. 64-25th ANNIVERSARY—Features more than 300 Champ-Item automotive replacement parts for all makes of cars. A handy service book. Champ-Items, Inc., 6190 Maple Ave., St. Louis 14, Mo.

134 STREAMLINER CATALOGS on Moog Coil action front end parts, coil springs, chassis parts and electrically heat-treated springs for cars and trucks. Moog Industries, Inc., 6851 Easton Ave., St. Louis 14, Mo.

135 WHEEL WEIGHTS—Colorful set-also describes eight types of balance weights covering 74 sizes. Also lists weight tools for application and removal of weights. Snagl Wheel Weight Mfg. Co., Kokomo, Ind.

136 LEATHER KLEEN—Catalog sheet, Tanner's Council approval, U. S. Testing Company report, sample and other information on the largest selling leather and plastic cleaner. Tanner Products Corp., Dept. S. J., 716 E. Washington Blvd., Los Angeles, Calif.

138 SPARK PLUG SPECIFICATION CHART—Covering all types of installations, designed to hang on wall, includes correct procedure on installing and servicing spark plugs. Spark Plug Division, Electric Auto Lite Co., Toledo, Ohio.

140 PRESSURIZED COOLING SYSTEM—Servicing and maintenance of the pressurized cooling system is detailed in a booklet available from Stant Mfg. Co., 1826 Columbia Ave., Connersville, Ind.

142 WIRE, CABLE AND IGNITION CATALOGS of Andrews Mfg. Co., 984 S. Theresa, St. Louis, Mo.

144 RADIATOR SERVICING EQUIPMENT—A new 48 page book "Blueprint For Profit" explains big profits servicing radiators, explains the inland method, illustrates and describes inland equipment, free factory training school, payment plan, etc. Inland Mfg. Co., 1108 Jackson St., Omaha 5, Nebraska.

145 FREE SAMPLE OF UPHOLSTERY CLEANER FOR AUTOMOBILES—Illustrated 4 page catalog, "Jensen Presents" which gives full information about Jensen's Special Auto Upholstery Foam and how it can profit jobbers, car dealers, and service stations sent with free sample of the product. Jensen Products, 4119 Broadway N. E., Knoxville 17, Tenn.

146 NEW XELO LACQUER SOLVENT LITERATURE—Colorful, 8 page booklet, which relates the complete story and practical application of Hi-La Lacquer Solvent now available. Attractive literature pictorially tells how to apply to fenders, panels and complete jobs. Included in booklet are prices and descriptions of many outstanding features of the Solvent. Xel-Lac Paint & Lacquer Corp., 250 Simpson St. N. W., Atlanta, Ga.

150 ELECTRIC POWER DRIVE—Bulletin DH 897 contains complete information on the New Manley P D-3 electric power drive which now requires no power take-off. Gives the operator a movable push-button control. Make a safe easy

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SOUTHERN AUTOMOTIVE JOURNAL

806 Peachtree St., N. E.

Atlanta 5, Ga.



NEW PRODUCTS AND CATALOGS

900—Washer-Wiper

A windshield washer-wiper, which automatically sprays the mixture on the windshield, starts the blades, stops the spray and parks the blades when the surface is clean, has been announced by Trico Products Corp., Ellicott and Burton Sts., Buffalo, New York.

The device, which is activated by driver pushing a control button, will



not operate if the water-solvent level is too low for adequate cleaning, thus preventing dirt from smearing across the dry glass.

Want more info? Use coupon on page 82 and you will get it!

901—Tire Sealer

A tire sealing compound, which is said not to cause driving impairment in balanced wheels and contains no rubber to interfere with function of the tire valve, has been introduced by Pera Products, Inc., 14700 Grandmont Ave., Detroit, Mich.

The compound covers the inside of the tire or tube with a mobile coating which becomes activated when there is a puncture. It seals without any considerable loss of air, the manufacturer said.

Want more info? Use coupon on page 82 and you will get it!

902—Cylinder Sleeves

Cylinder sleeves for car, truck and tractor engines, utilizing centrifugally cast type "A" graphite iron, have been introduced by Dura-Bond Engine Parts Co., 715 Loma Verde Ave., Palo Alto, Calif.

The sleeves are obtainable cut to length and are said to meet specifications of original equipment manufacturers. Tractor sleeves are avail-

able in overbore and finish-honed on the I.D.

Want more info? Use coupon on page 82 and you will get it!

903—Double Boom Pull

A same-side double boom pull to handle tough off-highway jobs has been developed for use in conjunction with the model WC-8 wrecking crane by the Manley Division of American Chain & Cable Co., Inc., York, Pa.

Mounted on the 8-ton crane, both booms pivot on a massive steel base to save back-in time and keep wrecker on solid surface. Eight tons of power is furnished on one side only if needed. Booms work together or independently with the special outriggers.

Want more info? Use coupon on page 82 and you will get it!

SELIG'S NEW Parts Cleaner



KLEENA-KARB Cold Dip Process

**REMOVES CARBON AND
GREASE FROM MOTOR
PARTS FASTER, BETTER**

Costs reduced, profits increased

No toxic or disagreeable odors

Will not etch aluminum and other metals

Cuts hardest carbon and grease from motor parts

Used by leading air lines

Listed by Underwriters' Laboratories

No excessive evaporation

**Selig's KLEENA-KARB six and twelve gallon
kits come complete with dipping basket.**

**THE SELIG
COMPANY**

Serving the automotive and trucking
industry since 1896.

ATLANTA DALLAS KANSAS CITY
HOUSTON NEW ORLEANS

The Selig Company
342 Marietta St., N.W.
Atlanta, Georgia

☐ Send me the 6-gallon KLEENA-KARB KIT
☐ Send me more information on KLEENA-KARB

Name.....
Address.....
City.....State.....

904—Hydraulic Hoist

A hydraulic hoist reported to be equipped to handle any car, including bantam-size and uniquely styled sports models of foreign manufacture, as well as light trucks, has been announced by Globe Hoist Co., E. Mermaid Lane at Queen St., Philadelphia 18, Pa.

A set of four patented swivel-type adapters is furnished as standard equipment. Height-adjustable contact pads can be rotated a full 360° to provide a means of contacting the frame or chassis of any passenger car or light truck. A shortened and narrowed frame lifting superstructure equips this hoist to handle foreign-

made cars, according to the manufacturer.

Want more info? Use coupon on page 82 and you will get it!

905—Tubeless Repair Kit

A tubeless tire repair kit consisting of a sturdy aluminum clamp, four hot vulcanizing patches, buffing tool and illustrated card of instructions has been introduced by Blackstone Manufacturing Co., Inc., 4630 W. Harrison St., Chicago 44, Ill.

The kit is said to be easy to use and to do swift and efficient repair on tread and sidewall.

Want more info? Use coupon on page 82 and you will get it!

906—Tailpipe Adapter

An all-steel adapter made to expand to fit all size bumpers and exhaust extensions in order to safely remove carbon monoxide from cars with dual exhausts built into the bumper has been announced by O.E.M. Products Co., 5651 N. Ashland Ave., Chicago 26, Ill.

Equipped with a safety wrap-around bumper chain and hook which



eliminates the danger of loose connections, the adapter is designed for cars including Cadillac, Ford, Lincoln, Mercury and Chrysler products.

Want more info? Use coupon on page 82 and you will get it!

907—Compressor Catalog

A 44-page air compressor catalog, featuring an engineering section, selection information and tables of computation, has been issued by Brunner Manufacturing Co., 1921 Broad, Utica 1, N. Y. Also included is information on continuous operating outfits, accessories and controls.

Want more info? Use coupon on page 82 and you will get it!

908—Test Stand

A run-in and test stand for gasoline engines, which flushes the inner engine with oil under pressure and tests with or without the oil pan, has been introduced by Storm-Vulcan, Inc., 2225 Burbank St., Dallas, Texas.

The stand tests the entire lubrication system and provides means for



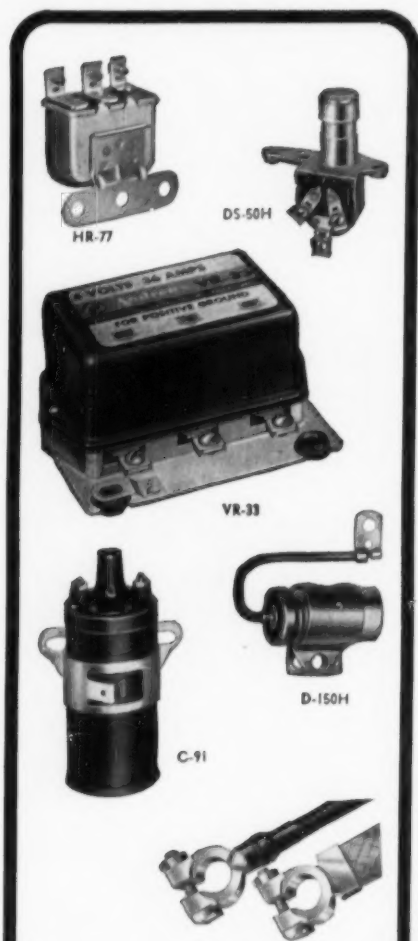
adjusting oil relief valves, tests surfaces for proper clearances, valves, tappets and push rods. Floor area requirement is 50" x 25".

Want more info? Use coupon on page 82 and you will get it!
(More New Products on page 88)

Engineered Parts for the Ignition Specialist

Replace with Andrews Ignition Parts, Wire and Cables and you satisfy customers and enhance your reputation in this field.

Andrews has been producing high quality parts for automotive service for more than 35 years.



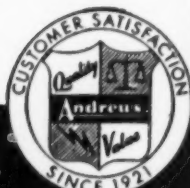
ORDER FROM
YOUR JOBBER

Andrews
MANUFACTURING CO.

ST. LOUIS, MO.

Southeastern Representative:
LAWRENCE M. HIRSIG & COMPANY
American National Bank Building
Jacksonville 7, Florida

Southwestern Representative:
LYNN & HEMPHILL
301 North Market
Dallas, Texas



"Highly satisfied with Commercial Credit Plan"

say **BERNARD L. COHEN** and **MORRIS BARON**,
partners in Baron Motors, successful Lincoln-Mercury dealer-
ship of Great Neck, New York.



"**W**E HAVE been operating over ten years and the services of COMMERCIAL CREDIT have helped us build a large agency. Our salesmen have found that stressing the many

features of their plan helps them close sales on the spot. COMMERCIAL CREDIT has always been willing to work with us in an effort to solve any situation."

COMMERCIAL CREDIT DEALERS ARE *Successful* DEALERS

A letter or call to your nearest COMMERCIAL CREDIT office will bring you prompt and expert help with your financing problems. Why not call today?



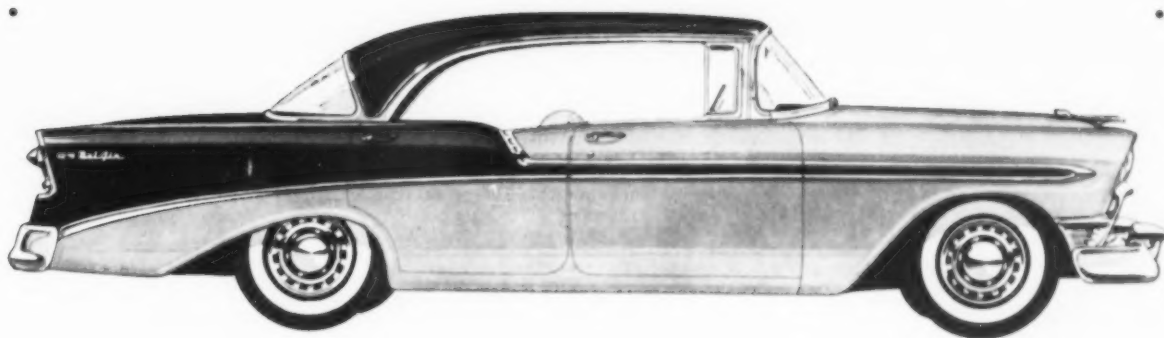
COMMERCIAL CREDIT CORPORATION

A service offered through subsidiaries of
Commercial Credit Company, Baltimore . . .
Capital and Surplus over \$180,000,000
. . . offices in principal cities of the United
States and Canada.

A new winner for Chevrolet dealers!



THE '56 CHEVROLET BEL AIR SPORT SEDAN—
above and on the opposite page—is a beautiful
example of Chevrolet's bigger, bolder look. Four doors
and no center pillars to mar visibility in this one!



The hot one's even hotter!

the '56 Chevrolet

New models—all with bold new *Motoramic Styling*. More models—including two new 4-door hardtops and two new 9-passenger station wagons. New excitement under the hood—up to 205 horsepower and 9.25 to 1 compression ratio. This—remember—is the car that broke the Pikes Peak record in a history-making preproduction trial.

Chevrolet dealers have a brilliant new winner on their showroom floors—the 1956 Chevrolet.

It's even hotter than last year's Chevy—the car that won new friends as fast as it won stock car races from coast to coast.

It has even more of the dynamite action that's zoomed its way into America's heart. This is the car that smashed the Pikes Peak record in a history-making and certified preproduction test! That's proof-in-action of its catapult acceleration, nailed-down stability and cat-footed cor-

nering ability—qualities that mean safer, more pleasant highway driving.

And this new Chevrolet has bold, new Motoramic styling, as you can see. They don't come any smarter—or go any sweeter!

These are some of the reasons why the new Chevrolet is getting such a warm welcome from the crowds that are coming in to see it. Reasons, too, why Chevrolet dealers are looking ahead to an even greater era of leadership. The '56 Chevrolet was born to be a winner!... Chevrolet Division of General Motors, Detroit 2, Mich.

*You'll profit
most with*

Chevrolet

*America's Foremost
Automotive Franchise!*

More New Products (Continued from page 84)

909—Valve Gapper

A valve-gapper specifically designed for use in Studebaker passenger-car and truck engines in adjusting valves on valve-in-head gasoline and diesel engines has been introduced by P&G Manufacturing Co., 305 N. E. Russell St., Portland 12, Ore.

A dial indicator and telescoping barrel are used to measure the entire

travel of the rocker arm prior to contact with the valve stem. The dial indicator is graduated in thousandths of an inch, which permits a positive visual reading of valve gap before, during and after adjustment regardless of the wear on valve stem and rocker arm, the manufacturer said.

Want more info? Use coupon on page 82 and you will get it!

910—Service Tool Manual

A 48-page GMC truck special service tool manual containing complete information on all the Kent-Moore special tools required to perform factory-recommended service on GMC gasoline- and diesel-powered trucks

has been released by Kent-Moore Organization, Inc., 5-105 General Motors Bldg., Detroit 2, Mich.

Prepared with the GMC truck serviceman in mind, the manual describes and illustrates tools to enable the serviceman to duplicate factory-assembled conditions and specifications and to perform essential maintenance operations for which no adequate standard tools exist, the manufacturer said.

Want more info? Use coupon on page 82 and you will get it!

911—Safety Exhibit

The KD 6 exhibitor of representative safety products, constructed of perforated, tempered masonite with 1½" frame, 36" x 48", has been introduced by K-D Lamp Co., 1910 Elm St., Cincinnati, Ohio.

Finished on both sides with tubular chrome legs, it requires 38" x 16"

QUALITY that RINGS Repeats!



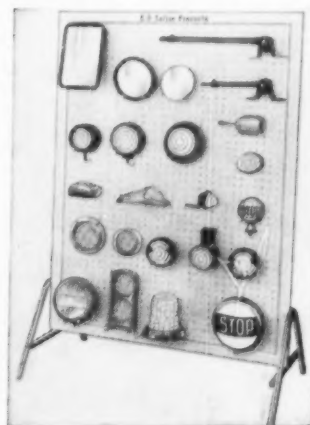
...says Danny Dollar

Chance or outside appearances may bring a customer in for the first time...but profitable repeat business is built on *quality* of parts and workmanship. It pays to guard your reputation with Niehoff Warranted Ignition Parts...precision engineered to assure performance that satisfies.

C. E. NIEHOFF & CO.

4925 W. LAWRENCE AVE. • CHICAGO, ILLINOIS

WAREHOUSES: NEW YORK 19, N.Y., 250 W. 54th Street. PHILADELPHIA, PA., 1631 Fairmont Ave. BOSTON 34, MASS., 254 Brighton Ave. BRANCHES: LOS ANGELES 15, CALIF., 1330 W. Olympic Blvd.



floor space when used for floor display. Handy hooks enable change of display and products can be exhibited on both faces. For wall display, it mounts on wall with special brackets and shows products from any angle.

Want more info? Use coupon on page 82 and you will get it!

912—Luggage Rack

A chrome-plated luggage rack said to add more than 150 lbs. of baggage space to the Ford Thunderbird has been placed on the market by Arnolt Corp., Warsaw, Ind.

Made of chrome-plated steel tubing with aluminum rear support brackets, it is mounted on the trunk lid and attaches simply to all models.

Want more info? Use coupon on page 82 and you will get it!

913—Tubeless Tire Sealer

A sealing agent designed to overcome the problem of wheel leaks on cars equipped with tubeless tires has been announced by Allen Products Corp., 20450 Sherwood Avenue, Detroit 34, Mich. The product is applied directly to wheel rims, seams, welds and rivets before mounting the tire and is said to have excellent adhesion to metal.

Want more info? Use coupon on page 82 and you will get it!

Carb Master "Pict-O-Poem"

CAR SICK ...



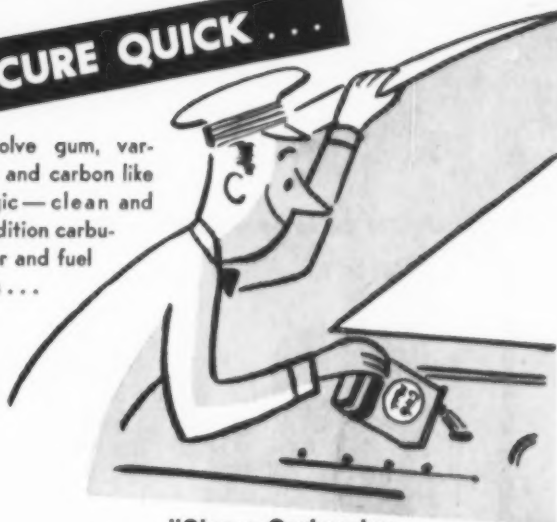
When carburetor and fuel lines are all gummed up . . . engine sluggish . . . bucks and stalls . . .



"Left at the Stop Line Again!"

CURE QUICK ...

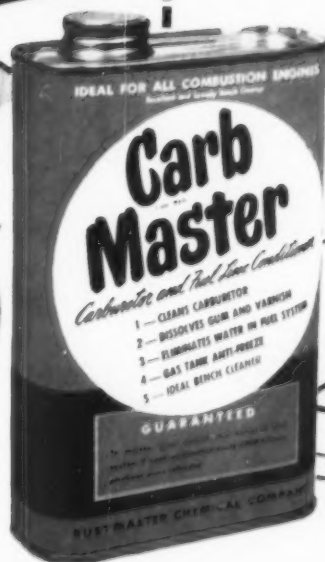
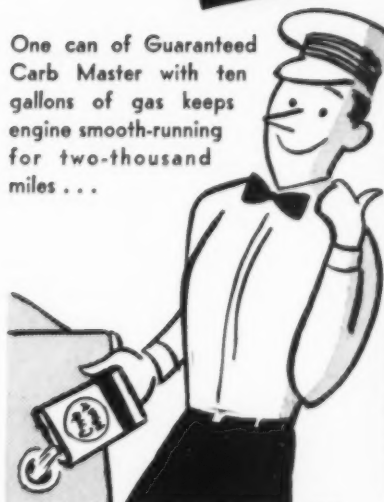
Dissolve gum, varnish and carbon like magic—clean and condition carburetor and fuel lines . . .



"Cleans Carburetor in Seconds"

JUST POUR ...

One can of Guaranteed Carb Master with ten gallons of gas keeps engine smooth-running for two-thousand miles . . .



"TWO THOUSAND MILES OF Complete Fuel System Protection in every Can."

"Excellent gas tank anti-freeze"

PROFITS SOAR ...

Naturally, customers buy all service from the Rust Master Dealer where they get guaranteed results!



RUST MASTER — LEAK MASTER — SLUDG-MASTER — CARB MASTER — PARTS MASTER



Rust Master
CHEMICAL CORP.
MFG. CHEMISTS
50-56 CROFTON ST., CAMBRIDGE 40, MASS.
The silent partners of motor efficiency

914—Spray Degreaser

A spray degreaser said to clean out dirty engine grease by pressing a button is being marketed nationally by the Minut Spray Corp., 945 George St., Chicago 14, Ill.

Available in 12-oz. aerosol bomb cans at hardware stores, automotive chain stores and other suppliers, the product sprays a non-caustic liquid over grimy engine parts which is said to loosen all dirt and grease and can then be hosed off with water. One 12-oz. can is reported to be sufficient to do a car or truck engine thoroughly.

Want more info? Use coupon on page 82 and you will get it!

915—Starter Drives

Clutch-, screw- and barrel-type starter drives, which have been rebuilt with special attention to the primary causes of trouble in each type, have been added to the line of Arrow Armatures Co., 15 Fordham Rd., Boston 34, Mass.

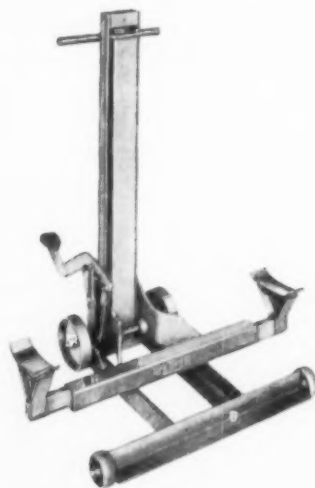
Clutch types usually fail because of worn bearing surfaces or loss of lubricant; more than 30% of screw-type failures are because of the counterweight coming off the pinion and barrel types often fail because of loose gears, the announcement said. Corrective steps have been taken.

Want more info? Use coupon on page 82 and you will get it!

916—Bumper Lift

A hydraulic bumper lift that reportedly raises the entire end of any car has been introduced by Weaver Manufacturing Co., Springfield, Ill.

Said to be easy to move and maneuver, the lift features an exclusive 2-speed lever mechanism for foot-power operating. Light loads are



lifted with lever in high-speed range, giving increased leverage and lifting power. Four-wheel load-carrying feature permits necessary movement of lift during lifting operation to maintain proper saddle contact, prevent tipping and ease strain on bumper, according to the manufacturer. Load capacity is 3,000 lbs.

Want more info? Use coupon on page 82 and you will get it!

917—One-Piece Contact Sets

Three popular ten-pack assortments of one-piece matched contact sets are now available for the three major ignition distributor systems, according to P. Sorensen Mfg. Co., Inc., Woodside 77, N. Y.

These assortments contain a combination of eight different matched sets which will service over 40,000,000 cars and trucks now in operation.

Want more info? Use coupon on page 82 and you will get it!

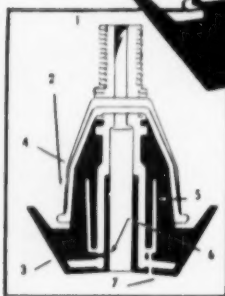


(More New Products on page 94)

No Tools

new Acme hood-type rubber-covered tubeless tire valve you install without tools!

#250 Acme Tubeless Tire Rubber-Covered Valve (Packed 5 to Box)



Fits all passenger car rims including safety rim ovals

The Acme rubber-covered valve is a completely new development.

Remove handsome chrome hood to install. Dip valve in water and insert through rim hole... maintaining finger pressure on base as you replace the hood with other hand to finger tightness only! Inflate... that's all!

- (1) Valve accommodates both long and short cores.
- (2) Base of metal hood is wider than rim hole... can't push into tire. Locks valve into position.
- (3) Flexible lip adapts to inside of rim... seals off air... is permanently leakproof.
- (4) Chrome plated brass hood gives smart look to car.
- (5) Fits all passenger car rim holes... even oval type.
- (6) Rubber on inside and outside of insert bonded through insert by 4 holes.
- (7) Metal foot is larger than rim hole... can't pull through opening.

ACME METAL TUBELESS TIRE VALVES



#251 All-Metal Clamp-In Valve. For all rims with oval holes. Individually packed in envelopes, 5 envelopes to box.



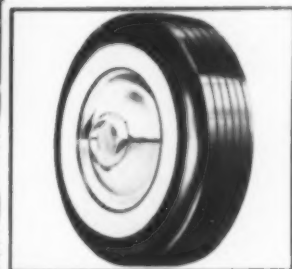
#252 All-Metal Clamp-In Valve. For all rims with 1/2" diameter, round holes. Individually packed in envelopes, 10 envelopes to box.

FREE CATALOG... write today for our complete new catalog of Acme products

ACME

ACME AIR APPLIANCE Co., Inc.
100-120 Hinsdale St., Brooklyn 7, N. Y.

Best Seller
for any car...any pocketbook
PORT-A-WALL®



Port-A-Wall converts any black tire to white or colors quickly and at low cost.



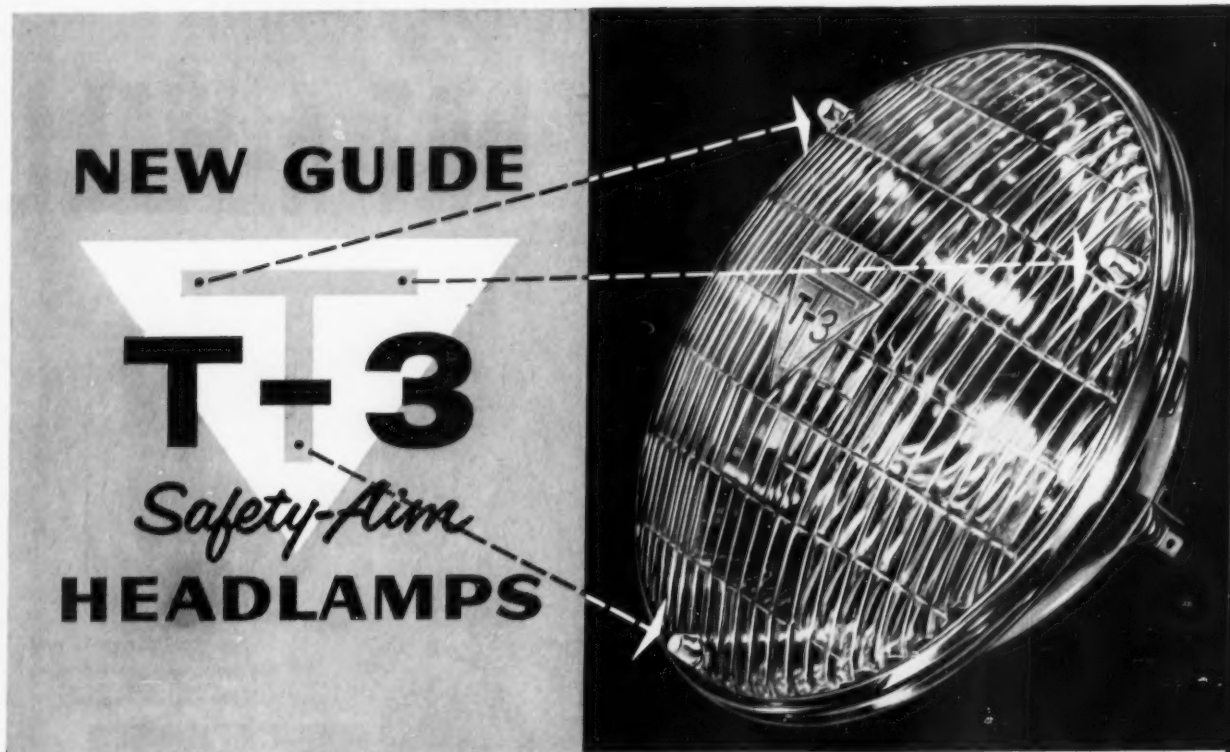
Port-A-Wall is individually packaged in an attractive carton. Easy to gift wrap.

Port-A-Wall is a transferable, all-rubber tire trim for all popular cars. Quickly installed - needs no cementing. You can now furnish a white sidewall or a sidewall in color to compliment latest car color styling. Low cost - anyone who drives a car can afford Port-A-Wall. Packaged in a set of four... available in white and pastel shades of blue, pink, red, yellow and green. Get in on Port-A-Wall profits now! Stock, feature and sell Port-A-Wall.

Manufactured exclusively by the Bearfoot Sole Company, Incorporated for

THE BARNES CORPORATION, WADSWORTH, OHIO

This and \$15⁰⁰* puts you



GREATEST SELLING ADVANCE SINCE GUIDE
INTRODUCED THE ELECTRIC HEADLAMP IN 1908!

COMPLETELY NEW APPROACH

Here's what GUIDE'S new and exclusive T-3 Safety-Aimers do:

Guide's new T-3 Safety-Aim Headlamp—an industry-approved all-glass sealed beam unit—throws a new light pattern on the lower beam. It throws more light to the right, increasing visibility by as much as 80 feet and, at the same time, reducing headlamp glare for approaching cars. It also makes a vast improvement in bad-weather visibility by reducing light reflected by rain, snow and fog. This new Guide headlamp is the greatest contribution to night driving safety and to headlamp selling since the introduction of the sealed beam itself.

Here's how GUIDE'S new T-3 Safety-Aimers aim headlamps perfectly:

The T-3 headlamp and aimers get their name from three "Guide Points" molded right in the lens of each Guide lamp. This triangle of three alignment points permits perfect aiming of Guide T-3 Headlamps in a matter of minutes and in broad daylight, *using only a screwdriver and the new T-3 Safety-Aimers*. You don't even have to turn headlamps on! One man can do the job any time, anywhere. But, only when headlamps are perfectly aimed do your customers get all the benefits so carefully built into these new, improved Guide T-3 sealed beam units.

in a BIG NEW BUSINESS!

NEW GUIDE

T-3

Safety-Aimers



*GUIDE'S AMAZING NEW  SAFETY-AIMERS COST ONLY \$15⁰⁰ PER SET—LET YOU AIM THE NEW GUIDE  HEADLAMPS PERFECTLY—IN MINUTES—IN DAYLIGHT!

TO HEADLAMP SELLING!

Here's what GUIDE'S new Safety-Aimers mean in terms of new business for you:

First, all General Motors cars and trucks for '56 will be factory-equipped with T-3 Safety-Aim Headlamps. Second, every car on the road equipped with sealed beam headlamps is a prospect—a market of over 50 million

cars and trucks—thousands in your area alone! Get in on the ground floor of a brand-new business. Guide's T-3 Safety-Aimers cost only \$15.00 per set.

Be the first Authorized Guide Dealer in your area to profit from the new and exclusive Guide Safety-Aimers.

CALL YOUR REGULAR



SUPPLIER

OR YOUR AUTHORIZED *Guide* HEADLAMP SOURCE!

More New Products

(Continued from page 90)

918—Automatic Tire Gauge

A combination automatic pressure tire gauge and inflator designed for rugged use with precision performance has been developed by Tru-Flate, Inc., 888 Ninety-Second Street, Oakland 3, Calif.

The gauge is built to withstand changing climatic conditions. It is fully adjustable on the spot, graduated for easy reading and consists of

a one-piece replaceable valve cartridge, bayonet-type indicator bar and a heavy-duty aluminum body.

Want more info? Use coupon on page 82 and you will get it!

919—Solvent Parts Cleaner

A solvent cleaner guaranteed by the manufacturer to have no corrosive effect on metal parts, carburetors, fuel pumps, etc., has been placed on the market in gallon cans and three- and five-gallon drums by Park Chemical Co., 8074 Military Ave., Detroit 4, Mich.

Said to be extremely fast-acting and long-lived even in open containers, this solvent requires only a short

soaking time, then parts may be rinsed in cold water and reassembled. It is used cold and reportedly evaporates more slowly than water and without odors.

Want more info? Use coupon on page 82 and you will get it!

920—Tubeless Tire Chart

A wall chart to provide service personnel with complete information about the servicing of tubeless tires has been made available to distributors and dealers by the Dayton Rubber Co., Dayton, Ohio.

Printed in red and black on heavy white paper and measuring 22 1/4" x 34", the chart is designed for display in service areas. It answers questions customers may raise regarding the proper way to mount, demount and repair tubeless tires.

Want more info? Use coupon on page 82 and you will get it!

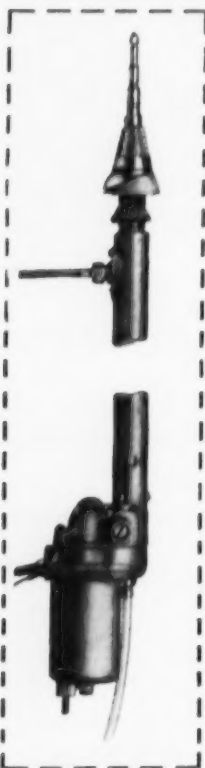
921—Creepers

A new creeper featuring an adjustable headrest on a standard size Jeeps creeper has been announced by the Lisle Corp., Clarinda, Iowa.

The J-E model, equipped with E-Z

Now Available to the After Market!

Famous CASCO Electric Power Antenna!



Here's the great Casco power antenna—the original power antenna that's factory-installed as optional equipment on such fine cars as: • Oldsmobile • Buick Pontiac • DeSoto • Chrysler (Mo Par) • Lincoln Mercury • Packard!

ONLY CASCO, THE SMARTEST DESIGNED, EASIEST TO INSTALL OF ALL POWER ANTENNAS, GIVES YOU THESE FEATURES!

- ✓ Universal Mounting!
 - ✓ Exclusive, flexible nylon casing for easy installation in confined space!
 - ✓ Flexible Nylon power drive
 - ✓ Indestructible Nylon gears!
- And**
- ✓ Fully Automatic Operation; a flick of the switch from inside the car raises or lowers antenna!
 - ✓ Maximum Radio performance!
 - ✓ Trouble-Free operation, even when mast is covered with ice, snow, grime or bugs.
 - ✓ Electric Motor Driven; assures constant power at all times on all grades; pull limit many times greater than any other power antenna!
 - ✓ Smart modern design that conforms with natural fender contour; PLUS, special adjustable ball-&-socket swivel for easiest mounting to any fender style.

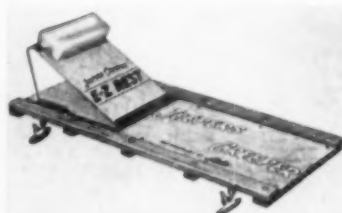


ANOTHER SALES WINNER IN THE GREAT CASCO "GOLD TIP" LINE—

The Only COMPLETE Line of Car Antennas Available to YOU—Manual, Power, Replacement Masts!

ORDER FROM YOUR JOBBER TODAY!

Casco Products Corp., Bridgeport 2, Conn.



rest adjustable in three positions, is 36" long and has four 3" Ralco rollers.

Want more info? Use coupon on page 82 and you will get it!

922—Windshield Sealer

A black paste-like liquid sealer for repairing windshield leaks and installing complete windshields has been added to the line of Presstite Engineering Co., 3798 Chouteau Avenue, St. Louis 10, Mo.

The windshield sealer, said to be suitable for applying to either wet or dry surfaces and to be non-corrosive, non-drying, non-hygroscopic and non-oxidizing, can be used for immediate windshield repair or replacement, it was reported.

Want more info? Use coupon on page 82 and you will get it!

923—Cleaning Machine

A "Turbo-Blast" cleaning machine, reported to clean several small engine blocks or one large block at once, has been announced by Storm-Vulcan, Inc., 2225 Burbank St., Dallas, Texas.

Said to be ideal for small shops, its dimensions are 58" x 42" x 41"; floor working area, 42" x 36", and its solution depth (not agitated), 18". Solution capacity is 115 gals.

Want more info? Use coupon on page 82 and you will get it!

Blue Streak Ignition is better for your business

39,000 top ignition men agree: Blue Streak ignition parts are sturdier; they last for more miles; their performance spurs your customer to tell his friends, "Great mechanic that Joe." You see, we build your reputation insurance into our parts. For example, look at the heavy-duty construction of the **BLUE STREAK DIMMER SWITCH.**



TRIGGER ACTION

Unique oscillating action (instead of conventional slow rotary action) snaps contact like a firing pin, cuts arc-at-break, lengthens contact life.

ALLIGATOR TERMINALS

With teeth that bite into wire terminal to form a permanent electrical and mechanical connection.

HERMETICALLY SEALED

Against the entrance of moisture or dirt. A vital feature, since the switch rides down there below the floorboards.



**SEE YOUR
BLUE STREAK
JOBBER**

**STANDARD
MOTOR
PRODUCTS, Inc.**
*Long Island City 1,
New York*

924—Silicone Wax Additive

An additive to prevent silicone wax residue from marring paint jobs has been introduced by Martin-Senour Paint Co., 2520 S. Quarry St., Chicago, Ill.

The additive, called Squirtz, is packaged in individual plastic tubes. One full tube to a quart of unreduced lacquer is said to combat silicone polish poisoning of paint films and to increase gloss and flow. According to the manufacturer, it will eliminate pitting, pin-holing, and fish-eyes caused by silicone polish residue.

Want more info? Use coupon on page 82 and you will get it!

925—Cold Body Solder

A lightweight, cold setting body solder that is said to bond perfectly to stainless and aluminum as well as to steel, with good expansion and contraction after it is applied, has been announced by Park Chemical Co., 8074 Military Ave., Detroit 4, Mich.

Called "Miracle Metal," the product smooths on with the same consistency as heated lead-tin body solder, is harder and has a retarded "skinning" effect. It can be ground easily, filed or sanded and keeps a good featheredge and a fine-grain surface clear of bubbles and pin holes for application of any type of paint,

according to the announcement. Want more info? Use coupon on page 82 and you will get it!

926—Switches

Switches said to give more driving ease plus better performance of automobile radios and designed for use in automobiles equipped with power-operated antennas and front- and rear-seat speakers are introduced by Cole-Hersee Co., 20 Old Colony Ave., Boston 27, Mass.



Cole-Hersee No. 7595
Radio Speaker Switch



Cole-Hersee No. 9137
Antenna Switch

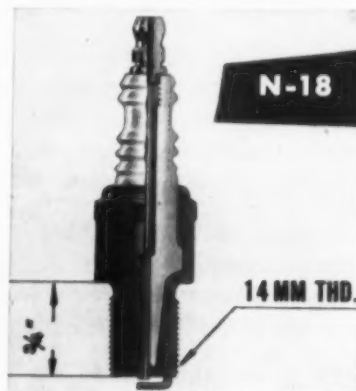
Push-pull momentary antenna switches No. 9137 and 9136 are used to raise and lower power-operated antennas from the driver's seat. Three-position rotary switches Nos. 7543 and 7595 permit independent or simultaneous operation of front- and rear-seat speakers.

Want more info? Use coupon on page 82 and you will get it!

927—Long-Reach Plug

A long-reach 14 mm spark plug designated the N 18 has been announced by Champion Spark Plug Co., Toledo, Ohio.

Original equipment in the high-compression, high-horsepower V-8 engines which power the 1956 line of Packard automobiles, the plug is also



being used in the 1956 Studebaker "Golden Hawk" models and in the 1956 Nash and Hudson V-8 engines.

Design features of the plug include seating the insulator above the outside gasket, preventing damage to the core as the result of excessive torque in installation; a wide heat range, long insulator core nose to resist fouling, sillment seals and the patented Champion five-rib insulator.

Want more info? Use coupon on page 82 and you will get it!



Mileage — you add it with Michigan Hi Therm Engine Bearings — best for replacement. You add miles of satisfaction — you stay miles away from arguments and make good jobs. You're miles ahead with faster, more accurate installations.



SPECIFY MICHIGAN HI THERM
Made to the same original equipment specifications as the bearings we supply to leading car and truck manufacturers.

michigan
Hi-Therm
engine bearings



**DETROIT ALUMINUM &
BRASS CORPORATION**

DETROIT 11, MICHIGAN

ALL NEW!



ALEMITE HOSE REELS

- Completely New Design!
- New Ease of Installation and Maintenance!
- New Eye-catching Beauty—More Compact!
- New Control Valves and Meters!

Attractive, Long-lasting!

Gleaming white enamel finish, rugged steel frames. Extra long rollers with bi-level design eliminates pinching and scuffing of hose, extra long outlet slot increases working radius with less strain on hose.

Powerful!

Highest quality spring supplies tremendous reserve power! Smooth-action exclusive "floating" hub has safety lock to prevent spring from breaking if hose is released abruptly.

Trouble-free!

New design inlet hose and swivel connection assures dependable performance. Deep-winding sheave prevents jamming and jumping of hose. No pinching, binding or rubbing.

★ ★ ★ ★

Safe! Easy Maintenance!

Reel slides in channel... safety catch locks it securely. Permits all normal maintenance without once removing reels from ceiling!



ALEMITE

REG. U. S. PAT. OFF.

Dept. M-125, 1826 Diversay Parkway, Chicago 14, Illinois

Never before have any hose reels offered so many advantages that *you've wanted*. The all-new Alemite Hose Reels can be installed so easily that *one man* can do the job. And you *never once* have to remove the reels from your ceiling for normal maintenance. New spring design assures smooth, steady tension for easier operation. You can work reels with *just half* the effort formerly required. New *fast latching* feature stops reel at exactly your desired working length.

Improved Alemite Hose Reels deliver chassis or gear lubricants, motor oil, automatic transmission fluid, air and water. Hose is always clean, out of the way when not in use—within arm's length when needed! Keep every operation in your service department going smoothly with Alemite!

Ask your Alemite representative for complete information — today!

928—Rimless Lights

Rimless, heavy-duty stop and tail lights have been placed on the market by Alco Division, Auto Lamp Manufacturing Co., 2901 S. Indiana Ave., Chicago 16, Ill.

The state-approved lamps contain a single-face lens and are designed to meet the requirements of trucks, trailers, tractors or buses, according to the manufacturer. The styles include surface type, flush type and



semi-flush versatile mountings for frame or fender. Made for either 6-8 volt or 12-16 volt systems, all lights are finished in weatherproof black, baked enamel with molded shatter-resistant lucite lens.

Want more info? Use coupon on page 82 and you will get it!

929—Crash Safety Pillow

A pillow measuring 20" x 13" x 10" flat, about 2½" thick with washable, grease-resistant covering for mounting on the dashboard of a car, has been introduced by The Ettinger Mfg. Co., 1319 S. Michigan Ave., Chicago 5, Ill.

Called the "Crash-Safety Pillow," it can be arranged by means of suction cup buttons to fit the contour of any dashboard, the manufacturer reported, and may be lifted for easy access to glove compartment, radio, etc.

Want more info? Use coupon on page 82 and you will get it!

930—Hydraulic Brake Fluid

An improved, heavy-duty hydraulic brake fluid, and synthetic rubber seals with new lip expanders for wheel cylinders, original equipment on 1956 General Motors cars and trucks, have been announced by Moraine Products Division of General Motors, Dayton 1, Ohio.

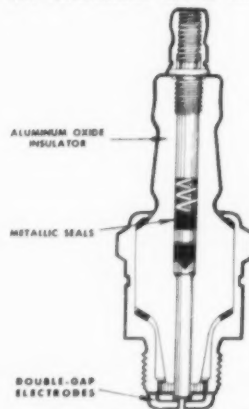
The Delco Super 11 brake fluid, improved with HTD, is reported to be stable at 50° higher temperatures and to have greater resistance to evaporation and vapor-lock. The GRS synthetic rubber cup seals are also said to be effective at 50° higher temperatures to match the performance of the brake fluid.

Want more info? Use coupon on page 82 and you will get it!

931—Spark Plug

A spark plug for high compression engines, which is designed for instantaneous and complete combustion of all gases, has been announced by Blue Crown Spark Plug Corp., P. O. Box 96, Defiance, Ohio.

The plug contains double-gap electrodes, adjustable for two- and four-cycle motors, to help overcome fouling. An aluminum oxide insulator



helps eliminate spark-over and provides a broader heat range. A conductive metallic center electrode seal makes for faster dissipation of heat and provides a seal against leakage.

Want more info? Use coupon on page 82 and you will get it!

COLE-HERSEE SWITCHES

It's what's Inside that counts...

**GUARANTEED FOR QUALITY AND
RUGGEDNESS.**

**ENGINEERED FOR PERFORMANCE
AND DEPENDABILITY.**

**MEETS THE SPECIFIC REQUIREMENTS
OF LEADING CAR MANUFACTURERS.**

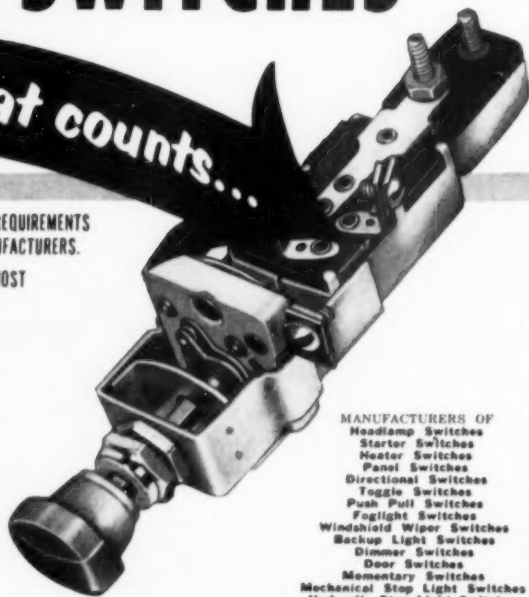
**BUILT IN AMERICA'S MOST
MODERN FACTORY.**

Here's the inside story of Cole-Hersee superiority...

Each Cole-Hersee unit is engineered to more than meet the electrical load it is designed to carry. Long life and excellent performance are guaranteed. If it is a 6-, 12-, 24-, or 32-volt switch that you require, Cole-Hersee has a unit specifically designed for that current.

Do not use a unit unsuited to present day current characteristics. All Cole-Hersee switches are individually tested prior to shipment. You can count on Cole-Hersee when you want the best.

Specify and insist upon receiving quality Cole-Hersee products from your jobbing source.



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Headlamp Switches
Starter Switches
Master Switches
Panel Switches
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Toggle Switches
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Plus: Plugs, Sockets, Fuse & Terminal Blocks, etc.

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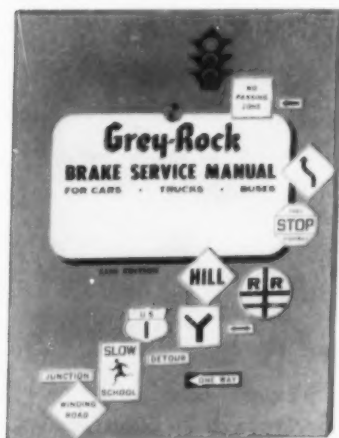
COLE-HERSEE

Over 40 Years of Consistently Better Products

20 OLD COLONY AVENUE, BOSTON 27, MASS

932—Brake Manual

A 60-page brake service manual, which illustrates and explains adjustment procedure on brakes for most passenger cars, some as old as 1934, and data on brake systems for trucks, buses and trailers, has been issued by



Grey-Rock Division, Raybestos-Manhattan, Inc., Manheim, Pa. Copies are available from Grey-Rock distributors.

Want more info? Use coupon on page 82 and you will get it!

933—Front Spring Tool

A front spring tool for '55 Chevrolets, said to be different in design from tools now in use for the same front coil spring installation and removal work, has been introduced by D & V Manufacturing Co., P. O. Box 3843, Birmingham 8, Ala.

The one-piece tool makes use of the two shock absorber bracket bolts already on the '55 Chevrolet. Mechanics are able to remove old coil springs and install new ones quickly with only a wrist movement, once the tool is in place, according to the manufacturer.

Want more info? Use coupon on page 82 and you will get it!

934—Trailer Hitch

A trailer hitch for passenger cars which retracts and locks out of the way under the car bumper, said to be safe and to conform with state motor vehicle laws, is announced by Specialty Engineering, Inc., 391 Topping Street, St. Paul 3, Minn.

The Retracto Hitch is designed for most late-model, popular and de luxe cars. It connects at three points: Bumper to frame brackets, and to the rear frame cross member directly behind the ball assembly.

Want more info? Use coupon on page 82 and you will get it!

935—Glass Sander

A sander for working fiberglass and for removing scratches in windshields, T. V. picture tubes and other glass has been announced by Detroit Surfacing Machine Co., 1333 East Eight Mile Road, Detroit 20, Mich.

On glass the sander is reported to

produce only mild surface heat, resulting in no discoloration and less breakage, with faster scratch removal. The results are said to be even more satisfactory on fiberglass.

Want more info? Use coupon on page 82 and you will get it!

936—Desludger Unit

A portable, 3-in-1 service unit said to desludge an engine, giving a thorough clean-up, as well as to change oil and filter and dispense new oil, has been introduced by Standard Manufacturing Corp., 106 N. E. Second St., Oklahoma City, Okla.

Want more info? Use coupon on page 82 and you will get it!

937—Transmission Tester

An automatic transmission testing machine which is said to give a complete check on shift pattern, show up gear noise, spot internal or external oil leaks, give a positive check on "slippage" and allow accurate oil pressure readings in a five-minute operation has been introduced by Mann Automatic Transmission Co., 6400 Truman Rd., Kansas City, Mo.

The machine features a Speed-Trol motor, 3hp for normal use and 5hp for constant use; a tachometer, oil pressure gauge and a G. E. automatic overload control.

Want more info? Use coupon on page 82 and you will get it!

Why it Pays . . . To Ask Your Jobber for Hastings Replacement Parts



Catalogs
available to
jobbers only.

"Rebuilt by Hastings" means that the work is done in a superbly equipped shop . . . by careful workmen under close supervision . . . and tested before shipping. Ask your jobber for Hastings replacement parts and you will be assured of complete customer satisfaction. Write us for the name of your nearest Hastings jobber.

The **Hastings Company**
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Generators
Armatures
Pressure Plates
Carburetors
Starter Bendix
Starters
Ford Distributors
Clutch Discs
Fuel Pumps
Bonded Brake Shoes



TIME SAVERS

Take Shortcut to Repair Plymouth Carb on Car

IT IS very difficult to make even the smallest repair on a 1955 Plymouth six-cylinder carburetor without removing the carburetor from the car.

Because it is designed in three pieces and bolted together by four long screws and two short ones in front to hold the top in place, to remove the top to set the float level or make any small repairs, all the bolts must be removed. Then the fuel line, throttle rod and vacuum line will pull the middle section of the carburetor out of line and disrupt the gaskets.

We find we can repair it quickly

right on the car by removing the two long screws on the right side of the carburetor, then removing the two short screws and using them to bolt the middle section to the base. This will hold the two lower sections together. Then the other screws holding the top can be removed and any necessary repairs made quickly and easily.—*Frank Roberts, Young Motor Company, 119 Columbia Street, Chester, South Carolina.*

Removing Brake Drum Keyed on Rear Axle

TO REMOVE brake drum where keyed on rear axle, place small pry bar between flange and drum.

Tap with hammer exactly opposite key on hub.

I have found many drums can be removed in this manner, and it is worth a try before taking time to place puller on hub.—*C. Kerna-ghan, 2324 Harris, Independence, Missouri.*

To Stop Leak, Relocate Seal on Front Pump

IF THE front pump seal on a Dynaflo has cut a groove around the hub of the primary pump, a new seal won't stop the oil from leaking.

A new primary pump is quite expensive, but the old one can be used by changing the location of

FREE
THIS HANDY
CABINET

WITH PURCHASE OF TRU-TORQUE
SAFETY CUP ASSORTMENT

MONEY-MAKING COVERAGE

An assortment that will enable you to service wheel cylinders on 95% of all Passenger Cars . . . All the fast moving items!

A REAL TIME-SAVER

A complete stock at your finger tips! Save that time and profit consuming trip to the jobbers on every brake service job.

NO STOCKING PROBLEM

All cups are marked for size and number. Look at the cup you've taken out and replace it from your cabinet with the same size or number. Order replacements from your jobber salesman on his regular call.

This offer open for limited time only. See your Jobber or contact OTTO-ITEMS, INC.

JOBBER'S NOTE: Packed & prepaid in cartons of six — including cup assortments.

A BEAUTIFUL COMPACT CABINET!



**HANG IT
ON YOUR
WALL OR
STAND IT
ON YOUR
COUNTER**

Size:
13"x16"x3 1/2"

**ASSORTMENT
CONTENTS**
Includes 8 cups
(with self centering
expanders) and 4 springs
each of the following sizes.

Size	Part No.	List Price	Net Price
7/8"	T-3023	\$2.40	\$1.44
15/16"	T-3535	2.40	1.44
1"	T-1499	2.80	1.68
1-1/16"	T-1219	2.80	1.68
1-1/8"	T-2936	2.80	1.68
*1-1/8"	TT-099	7.62	4.57
1-3/16"	T-6600	2.80	1.68
1-1/4"	T-666	2.80	1.68
1-5/16"	T-12000	2.80	1.68
1-3/8"	T-857	2.80	1.68

*Chrysler-Desoto-Dodge-\$32.82 \$19.21
Plymouth 1946-1954

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LOW INVENTORY COST**

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\$7 IDEA?

will be paid for every time - saver or shop short - cut accepted for publication in this section. A photo or rough sketch will make your idea more valuable. Only original items, not previously published, offered for our exclusive use, can be considered. Send them to: Southern Automotive Journal, 806 Peachtree St., N. E., Atlanta 5, Ga.



the front oil pump seal so it will contact a new place on the hub. The seal can be relocated by putting a high clutch snap ring behind the seal.

This will move it forward enough to contact a new area of the primary pump hub.—Arthur Kay, Sitton Buick Company, 38 Westfield Street, Greenville, South Carolina.

Oklahoman Offers Helpful Hints

TO RELIEVE static on car radio place condenser on the battery side of coil.

To stop corrosion on battery connection, place oiled felt washer under lead washer.

To locate bad plug wire ends, test plug wires with two volts of battery and door bell.

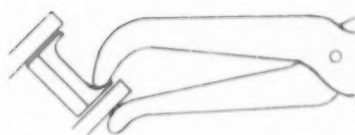
Install a turnbuckle in the hand

brake cable to tighten hand brake easily.

To hold the brake on, use a 12" monkey wrench, placing the handle in front of brake pedal and the jaws on the clutch pedal shank.—R. R. Million, 3028 N. W. 14, Oklahoma City, Oklahoma.

Removing Cylinder Pistons On Chrysler Models

TO REMOVE the wheel cylinder piston or cups on Chrysler-made cars, the brake spring plier



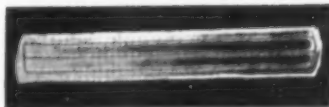
is just right.

Remove dust cover and brake shoe pin, place sharp end of plier in piston hole, tighten grip on plier around cylinder and with a down-and-outward pull, draw it out.—C. Kernaghan, 2324 Harris, Independence, Missouri.

SHHHHHHHH!

Crown valve pads make CHEVROLET V-8 quiet as a mouse!

Below you see the Crown #508 being installed on a '55 Chevrolet V-8. Pour regular motor oil on the pad until it is saturated. When placed over the valve mechanism the pad forms a flexible cushion which lubricates the valves and silences clicking NOISES. Crown pads are designed to accomplish four important functions: (1) to stop valve clicking on overhead valve motors, (2) to aid in proper lubrication of the rocker arms, (3) to protect the valve stems from condensation drip, (4) to strain any dirt picked up by the fan and backlash through the breather.



The pad is made of cotton wicks sewed together and enclosed in a porous duck cover. The exact dimensions hold the pad in place when installed.

The Crown #508 is carefully designed for the new Chevrolet V-8. Once installed over the valve mechanism, your customer's Chevrolet will perform quieter than a mouse! Crown pads are also available for: Chevrolet 6, Ford Y-Block V-8, Ford 6, GMC, Buick Standard and Master, Nash, Studebaker, International Trucks, Oldsmobile, Lincoln, Cadillac, Willys, MG, Austin.

"Crown—the original and leading overhead valve pad"

EARLE ESTES MFG. CO.

UNION CITY, GEORGIA

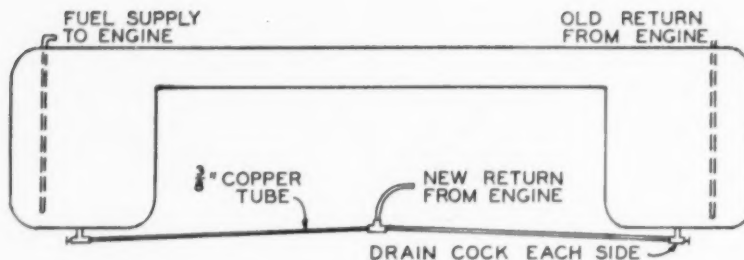


To Replace a Cam Shaft Without Pulling Engine

TO REMOVE and replace cam shaft without pulling the engine on Chrysler product cars, with the exception of later model V-8 engines, use spring-type wooden clothespins to take out valve tappets and push rods instead of R. R. oil pan.

Clamp pin around tappet and push rod to hold tappets up while you R. R. camshaft. — George Mathis, Jr., c/o Glovers Motor

Company, 176 North Liberty Street, Spartanburg, South Carolina.



Stopping the Freezing On Saddle Tanks

ON DIESEL trucks with saddle tanks, water often freezes in the cross-over line. With most systems this usually fills one tank and the other is pumped dry. This hook-up shown above will positively prevent freezing as long as the engine is running, since it keeps any water present in constant motion. — J. C. Kuhn, 6346 N.W. 40 Street, Miami Springs, Fla.

Ending Bolt Breaking On '49-'50 Fords

IF OFTEN run across '49 and '50 Fords which break the bolts that fasten the steering sector to the frame.

This can be corrected by putting a muffler clamp 1½" in diameter around the bottom of the sector. Then, using a strap iron 4" long and 1" wide, drill two ¼" holes and bolt to muffler clamp, letting it extend out toward the frame with 1" bend in the end protruding toward frame.

Using another strap 4" long by 1" wide, drill ⅜" hole in each end and bend 1" on one end and 2" on the other. Let the 2" bend go around bottom of frame and up to original bolt which holds sector to frame.

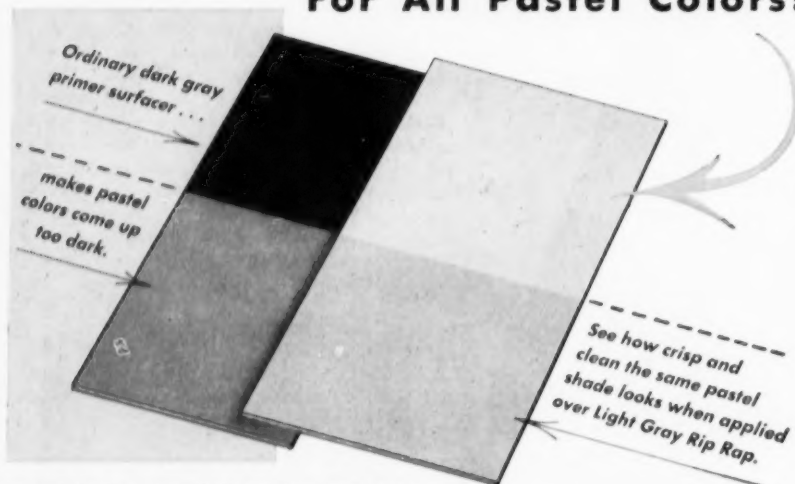
Using ⅜" bolt, bolt the two strap irons together, drawing them to maximum requirements, and lock with lock nut. This will hold it solid and will not break any more bolts. — Forrest J. Beeler, Lancaster, Missouri.

Ernest Allen, Fort Worth, Dies

Ernest Allen, a Chevrolet dealer of Fort Worth, Texas, and a past vice-president and director of Texas Automotive Dealers Association, died from a heart attack in Marietta, Okla., in October. He had been president of the New-Car Dealers Association of Fort Worth and a member of the General Motors Dealer Council.

DITZLER'S DZL 3355

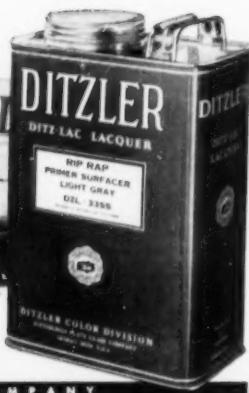
Gives You More Accurate Matches For All Pastel Colors!



DITZLER'S new Light Gray Rip Rap—DZL 3355—is a real necessity in every paint shop today. This new primer surfacer gives you more accurate matches—brings out the true color of the popular pastel colors on today's motorcars.

● The high solid content of this new Light Gray Rip Rap gives more film-forming materials. Fewer coats are needed. It feathers out without splitting or chipping at the edges. The very fine pigments it contains require less sanding. You also get excellent hold-out that improves the looks of both lacquer and enamel colors.

● With Light Gray Rip Rap you save labor and material—and your customers get better looking jobs.



Ditzler Color Division, Pittsburgh Plate Glass Company, Detroit 4, Michigan.



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IN CANADA: CANADIAN PITTSBURGH INDUSTRIES, LIMITED

H. Gordon Payne, left, a past president and past regional vice-president of Automotive Booster Club, is shown here presenting the "Mr. B-4" award to Baron Creager, editor of the club publication, "The Jack Rabbit," and Southwestern editor for Southern Automotive Journal. Payne, incidentally, was the first member of the club to be awarded the "Mr. Behind" certificate. The "Mr. B-4" award goes annually to the member whose club work is judged as outstanding for the year.



Jobber News

(Continued from page 43)

Stroud and Walden Join at Charlotte

D. C. "Dick" Stroud and Carl E. Walden have formed a partnership known as Stroud & Walden, with offices at 127 West 7th Street, Charlotte, N. C.

Both formerly operated as manufacturers' agents out of Charlotte. The partners, who represent 30 years' experience in the industry, will cover the Carolinas, Virginia, southeastern West Virginia and eastern Tennessee. Lines handled will include Ajax Auto Parts, Rittenbaum Brothers, K-D Lamp, Buxbaum, Beverly Manufacturing and Linderme Tube.

Walker Mfg. Selects Three for Sales

WAYNE Rapp has been appointed sales manager of the wholesale division of Walker Mfg. Co. of Wisconsin. Rapp has been with Walker for 19 years and for the past year he has been part of the home office sales executive staff.

Robert E. Archer will be field sales manager of wholesale sales. J. W. Jaspersen was appointed sales manager of the original equipment division.

Five Southerners Added To AERA Membership

FIVE Southern firms have been added to the membership roll of the Automotive Engine Rebuilders Association.

They are: Barnes Automotive Service, Rolla, Mo.; Decatur Parts Co., Decatur, Ala.; Hare Bros., Inc., Mt. Ranier, Md.; Quality Sales, Inc., Charlotte, N. C., and Suburban Ring & Bearing Co., Silver Springs, Md.



Don't wait any longer
— let **HaDees**
put **HEAT** in your **FLEET**

Get the facts now on specially
designed units or easy-to-
install standard models for
MORE heat at LESS cost.



FOR EXAMPLE:

Model H-555, designed for easy installation, guarantees maximum volume of heat to beat the most intense winter weather. Equally recommended for passenger car or truck heating.



Model H-355 — Finest little low-cost heater ever built. Engineered for out of the way dash mounting. This economy-priced HaDees model puts the emphasis on maximum heat in minimum space.

WRITE FOR DETAILS ABOUT THE

Hottest Heater Deal
HADEES HEATERS

HaDees Heater Division of the Gabriel Company, Rockford, Illinois

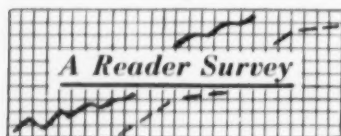


These warehouse distributors from the Southwest were guests recently of Monroe Auto Equipment Co. at its hunting lodge on Lake Erie near Monroe, Mich. (l. to r.): Back row, J. E. Bickel, merchandising manager of Monroe; John Stringer, B. B. Burk Co., Dallas, Texas; H. B. Braden, American Gear, Dallas, Texas; Elmer Miller, Straus-Frank Co., Dallas, Texas; Joe Owens, Owens Supply, Enid, Okla.; Sid Revis, Standard Parts Co., Tulsa, Okla.; C. S. McIntyre, vice-president and sales manager of Monroe; front row, Carl Tate, J. B. Cook Co., Little Rock, Ark.; B. B. Burk, B. B. Burk Co.; Jack Durrett, Tyler Service Parts, Tyler, Texas; T. C. "Buddy" Garrett, Straus-Frank Co., Dallas, Texas; Vernon Kleier, Ponca City Automotive, Ponca City, Okla.; Mark Hanna, Hanna-Gray Co., Fort Smith, Ark. Also attending but not in the picture was Louis Barnett, Cogdell Auto Parts, Fort Worth, Texas.

90% Report Bigger '55 Sales Volume But Net Profit Continues a Bother

HIGHER sales volume continued to be reported last month by wholesalers over the South and Southwest. They continued to report, too, some difficulty in maintaining a satisfactory net profit despite the greater sales.

Returns from the 350 questionnaires mailed out showed 90% with higher volume — some as high as 35% but generally in the ten to 20% range — for the first



ten months of this year compared with the same period of 1954. The same comparable volume was reported by 7½% and 2½% listed a downturn in sales.

A Tennessean's comment was folksy but also factual for a lot of the respondents:

"Our sales volume is about 25% above, but it's hard to show a profit. It's the old, old story: You work your fingernails off and end up in the red!"

The highest increase, 35%, came from a firm in a small Virginia town.

Several officials cited additional

salesmen or new branches as accounting for the increases.

Said a South Texan:

"We have just added one more outside salesman and we have increased our volume about \$4,000 a month. For the last eight months it figures an increase of 10%."

A well-known Florida house, whose volume the last ten months is up 15%, reported "the past two months the best in ten years."

A Texan said:

"Our sales for the first ten months of this year are 15.3% ahead of the same period last year. We have had a better farm crop condition this year than last and that has accounted for most of this increase."

The reports of increases were scattered throughout the 19 states covered by SOUTHERN AUTOMOTIVE JOURNAL. Some of those with reports of increases above 10% also observed that the outlook for the months ahead appeared "good" too.

Ed Smitherman, general manager of Auto Parts & Bearing Co., Hot Springs, Ark., announced the following changes in personnel: **Buddy Brooks**, bookkeeper; **Dewey Russell**, counterman; **Red Parsons**, shipping and receiving, and **Pete Evans**, outside salesman.

Miami Patten Sales Is Sold to Dupy

E. WEBB Patten announced last month the sale of Patten Sales Co., Inc., Miami, Fla., to Vernon M. Dupy of Western Springs, Ill., son of Vernon A. Dupy, director of procurement, scheduling and general merchandising for United Motors Service Division of General Motors Corp.

Patten Sales at Jacksonville, Fla., was not involved, according



President Patten

to Patten, a former president of the Southeast Automotive Show.

Dupy graduated from the U. S. Naval Academy in 1946 and resigned from the Navy as a lieutenant (jg) in 1949. He was employed by National Lead Co. as a representative in the Detroit area and advanced with that firm until he became credit manager of the Chicago branch.

While at National Lead he took a night course at Northwestern University and received an MDA degree in June, 1954. For the past year he has been an instructor at Northwestern on credit and collections.

Patten will continue as president and agreed to stay with the firm until 1960. No changes in personnel are contemplated now, he said, and the company will continue with the present lines.

Cotton States Plans To Hire Manager

AT A recent meeting of Cotton States, Inc., the president was authorized to appoint a committee for the purpose of employing a full-time manager and to provide larger quarters, including sufficient warehouse space, to facilitate the increase in its operation.

The meeting was held at Jackson, Miss.

Officers of Automotive Booster Club B-46, Lubbock, Texas, include (l. to r.): Herbert L. Gerald, retiring president; Joe Roycraft, first vice-president; Ivy Spann, treasurer, and Leo Riggs, secretary. Absent when photo was made were President J. D. Hogue and L. L. Herr, second vice-president.



Expansion Plans Announced By Florida Company

PLANS to enlarge the office space of Roy's Auto Parts, Inc., Key West, Fla., have been announced. The additional ten feet of space to the office, called the "penthouse office" since it is an extension of present rooftop accommodations, will be finished soon.

Increased volume of sales in 1955 over last year makes the expansion necessary, officials said. According to the owners, this increase is greatly due to the efforts of Jesse Abbott and Jabez Martin-Vegue, who joined the firm in January, 1954.

Virginian Opens Branch

Auto Spring & Bearing Co. of Roanoke, Va., has opened a branch in Salem, according to President Gordon E. Johnson. The 4,000-square-foot brick and cinder block structure will carry a line of parts duplicating the Roanoke stock.

Raymond E. Carlson (right), vice-president in charge of sales and a director of Tung-Sol Electric, Inc., since 1938, relinquished his sales responsibilities November 30. George W. Keown, who has been elected a vice-president, assumed the sales responsibilities December 1. Keown became initial equipment sales manager in 1946 for both the automotive lamp and electron tube divisions and in 1950 was made general sales manager.



NEW ... *Lisle*

RIDGE REAMER

for *faster, easier, cleaner*
RIDGE
REAMING

New swinging type tungsten carbide cutter is specially designed for short stroke high compression engines. Never needs sharpening.



MODEL
SR-7

Range

2.6" to 5 1/4"

Attractively Chrome Plated

it's a good tool...it's a



LISLE CORPORATION
Box 1028 Clarinda, Iowa



Newly-elected officers of Carolinas Automotive Booster Club B-33, Charlotte, N. C., are (l. to r.): Seated, John N. Argos, secretary; Neil S. Williams, treasurer; standing, Cyrus F. Carter, Jr., second vice-president; C. C. Campbell, Jr., first vice-president, and Thomas F. Grady, president of the group.

Pullman Chooses Daniell For Sales Director

JOHNNY Daniell has been named sales director of the Pullman Vacuum Cleaner Corp., Boston. He is former owner of the Johnny Daniell Co., Decatur, Ga., a Pullman representative.

Beginning as a jobber salesman for an Atlanta automotive supply dealer during the '30's, Daniell became an automotive jobber in Sarasota, Fla., in 1946.

The Johnny Daniell Co. was organized in 1950 by Daniell.

Benedict Dies in Texas

Rollin N. Benedict, president of the Ace Rubber Co., Dallas, Texas, died last month of a heart attack. He moved to Dallas from California in 1947 to become president of his company.

Florida Firm Opens Branch

Roy's Auto Parts, Inc., Key West, Fla., has opened a branch store in Marathon, Fla., on U.S. Highway 1. The branch is operated by Jabez Martin-Vegue.

Delco batteries, AC plugs and Sherwin-Williams paints have been added to the line of Auto Parts & Bearing Co., Hot Springs, Ark., Ed Smitherman, general manager, reported.



Keith Broyles (top), executive secretary of Automotive Wholesalers Association of Tennessee, was elected president of Automotive Wholesalers Trade Association Executives at their semi-annual meeting in Atlanta recently. He succeeded G. C. Morris, executive director, Automotive Wholesalers of Texas. Other officers elected were Jesse F. Jones, Jr. (center), executive secretary, North Carolina Automotive Wholesalers Association, vice-president, and J. H. Crutchfield (bottom), executive secretary, Automotive Wholesalers of Georgia, secretary and treasurer.

Tupelo Firm Opens Plant

Mills-Morris Co., Tupelo, Miss., has erected a building with air-conditioned offices and display floor, a complete machine shop and parking facilities for 40 automobiles.



A. V. Elliott, Jr., former territory salesman for Braxton Auto Parts, Inc., Whiteville, N. C., has been named manager of the Tabor City branch store. He is a native of Tabor City and has been associated with Braxton's for the past eight years.

Poynter of Black & Decker Dies

William Loyd Poynter, 55, mid-west regional sales manager of The Black & Decker Mfg. Co., died recently of a heart attack during a company meeting in Hershey, Pa. Poynter joined the company as a territory salesman in 1925.

Virginias-Carolinas Date Set

The spring convention of the Virginias - Carolinas Automotive Wholesalers Association will be held March 14-15 at the O. Henry Hotel, Greensboro, N. C., President John F. Midyette of Standard Parts Corp., Richmond, Va., announced.

"Paul McKee of Indianola, Miss., has joined our sales force as outside salesman," Edwin E. Scott, partner and sales manager of Scott's Automotive Products, Leland, Miss., reported.

"We have added Dwight Williams as an inside shipping and receiving man," announced F. M. Henson, owner, Marianna Auto Parts & Supply Co., Marianna, Fla.

Union Oil Company of California's lubricating oils and greases have been added to the line of Brown's Supply Co., Sedalia, Mo., according to Jess Brown, partner.

Commercial Solvents antifreeze products have been added to the line of Mid-Ga. Auto Parts Co., Inc., Griffin, Ga., Russell Allen reported.

John Harvey, left, past president and current regional vice-president, presents the annual "Mr. Behind of B-4" (Dallas) award to A. A. "Art" Ways, a past international president of Automotive Booster Club. The "Mr. Behind" certificate is facetious in nature and for the past three years has been presented to some veteran club member who has held practically every conventional award within the power of the club to bestow. It was conceived on the theory that if the club were to have a "Mr. B-4" every year, there should also be a "Mr. Behind." Shown seated in the background is A. A. "Art" Ways, Jr.



Barrett Names Managers

Barrett Equipment Co. has named C. C. Joslyn of Detroit and Dick White of Dallas, Texas, as sales managers, eastern and western divisions, respectively. Joslyn has been handling the car factory accounts for Barrett at Detroit and White, who will move to permanent offices at Los Angeles, has been with the company since 1952.

R. E. Dietz Hires Two

R. E. Dietz Co., Syracuse, N. Y., has appointed John T. Scanlon and Associates, Fairview Park, Ohio, and Aaron and Bell, Atlanta, Ga., as sales representatives. The Scanlon firm will cover Kentucky and West Virginia, and Aaron and Bell the additional states of Virginia and the Carolinas.

Missourian Changes Name

Lewis Motor Supply Co. is the new name for The Lewis Machine Co. of Joplin, Mo. This company has served the Joplin area for 36 years with parts and machine shop service.

A. B. Conley of Florida Dies

A. B. Conley, 67, Conley United Service, Jacksonville, Fla., died recently. He was born in Newark, Ohio, and had lived in Jacksonville since 1912.

Mountjoy Opens Branch

Elliott Hahwel has been installed as manager of the branch opened by The Mountjoy Co. at 312 West Avenue in San Antonio last month.

**DON'T GAMBLE with sales
BE SURE ... Sell**
WITTEK Sure-Tite
ALL-PURPOSE HOSE CLAMPS

**Stainless Steel Construction • Aircraft Quality with Wittek Worm Drive Features
• Quick and Easy to Apply • Complete Range of Sizes • Convenient Packaging**

Quality materials, strong construction, and easy application of Wittek Hose Clamps assure you of top sales. You can always be sure when you sell Wittek — hose clamps in all sizes ... for every purpose ... and all at one source of supply. See your Jobber today or write direct to Wittek Manufacturing Co. for complete details.

AVAILABLE IN CARTONS

Every size Wittek Hose Clamp is now available in attractive display cartons of 10 clamps each. They give added convenience for storing or stacking in displays.



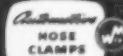
SEE WITTEK'S COMPLETE LINE OF HOSE CLAMPS



SOUTHERN REPRESENTATIVES

Lawrence M. Hirsig & Co., American National Bank Bldg., Jacksonville 7, Fla.;
McClintock Sales, Inc., 2631 Commerce St., Dallas 1, Texas.

WITTEK MANUFACTURING CO.



4341 West 24th Place, Chicago 23, Illinois

Vickers Named President By Texas U-C Dealers

THE Texas Independent Automobile Dealers elected J. N. Vickers of Houston president at their recent 11th annual meeting.

Other officers selected were O. W. Conditt of Fort Worth, C. B. Stovall of Abilene, B. D. Gibson of Tyler, vice-presidents; Clyde Cox of Tyler, honorary president; H. C. Poindexter of Lubbock, secretary, and Johnnie Geary of Fort Worth, treasurer.

Lee Sullivan of Dallas was elected vice-president of the eastern area; Joe Fralin of Lubbock, western; Wilbur Guillet of Houston, southern, and Charles H. Partlow, central.

The principal speaker was Attorney General John Ben Shepard, who sounded a warning against apathetic attitudes toward government and outlined a number of "signs" to watch for as symptoms of political bossism.

1956-65 Oil Demand Equals Present Proved Reserves

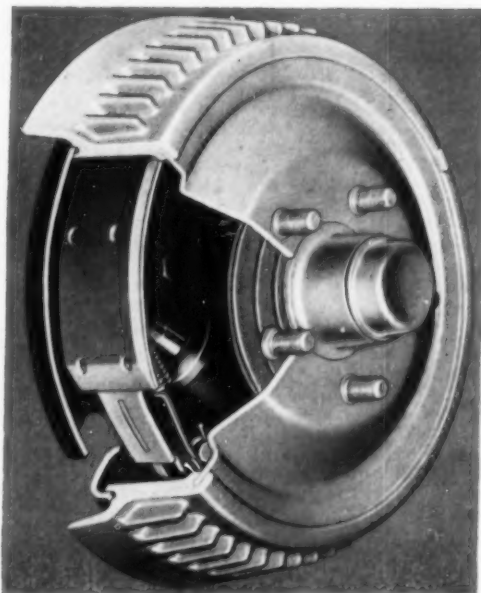
THE expected oil demand for the next ten years is nearly 36,000,000,000 barrels, almost exactly equalling this country's present proved reserves, according to Albert L. Nickerson, president, Socony Mobil Oil Co.

Though it is misleading to say that "we're running out of oil, we all know it's getting harder and more expensive to build up our reserves. This is true not only because oil is becoming harder to find, but because our need for it is increasing so rapidly," he said.

Unless trends in production and consumption are reversed, producers will find it "increasingly difficult" to keep up with demand over the next ten to 20 years. The situation exists in spite of the biggest drilling program in the industry's history since World War II.

The 2,000,000-barrels-a-day reserve producing capacity which has been built up by the high drilling rate should not be misunderstood since it "probably does not accurately measure our ability to produce for any period longer than a few months," Nickerson said. The annual rate of production in

A finned brake drum is an important safety feature on the 1956 Studebaker President and Golden Hawk. In providing increased surface area and air circulation, the fins consistently cool the drums and lining.



the U. S. has never significantly exceeded 8% of reserves even at maximum efficient rates of production, he said.

Even though petroleum is imported for the next ten years at rates recommended by President Eisenhower's cabinet committee and production continues at the average rate of 8% of proved reserves, "we would then need to prove an average of 4,100,000,000 a year over the decade in order to meet domestic demands."

Consumption of liquid hydrocarbons in the country last year was about 7,750,000 barrels a day, and this year's figures may increase to 8,300,000 barrels, upping the percentage 7%, he said.

Nickerson predicted that by 1960 the figure would rise to 9,700,000 barrels; in 1965 to 10,700,000, and in 1975 to 12,250,000.

Florida Ford Dealer Dies

Frank "Papa Gus" Gustafson, 87, of Green Cove Springs, Fla., died in a Jacksonville hospital recently. Gustafson, a native of Sweden, had lived in Green Cove Springs for the past 65 years. In 1914 he organized the Gustafson Motor Co. and at the time of his death was one of the oldest Ford dealers in the state.

Ford Division Names Southwest Official

LEWIS T. Warriner has been appointed executive assistant sales manager for the Southwest region of Ford Division, Ford Motor Co., R. R. Anfin, regional sales manager, announced. R. H. Dossat succeeds Warriner as assistant manager of Ford Division's New Orleans sales district.

Warriner, a native of Eddy, Texas, joined Ford in 1945 as a field manager in Houston after service in World War II. Dossat, a Louisianan, joined Ford in March, 1946. He has been zone manager, business management manager and special field manager in the New Orleans district.

Farnsworth Leaves Olds For Nashville Deal

DANIEL T. Bogart has been appointed used-car merchandising manager for Oldsmobile, with headquarters in Lansing, Mich. He succeeded O. C. Farnsworth, who has resigned to take over an Oldsmobile dealership in Nashville, Tenn.

Burton E. Green, formerly assistant zone manager at Atlanta, Ga., succeeded Bogart as zone manager in Buffalo.



Dodge Division of Chrysler Corp. has promoted Ed P. Letscher, at one time assistant regional manager in Memphis, Tenn., and Greensboro, N. C., to sales manager-field operations, car and truck. Letscher has most recently been assistant general sales manager of cars.

Ford's Mahwah Plant To Up Production

FORD Division's new Mahwah, N. J., assembly plant will be placed on a two-shift production schedule starting January 3 to meet increased demand for Ford cars and trucks, Robert S. McNamara, Ford Motor Co. vice-president and Ford Division general manager, announced last month. Most other plants will continue running at 53 hours a week.

"Addition of the second shift at Mahwah, which is our major plant in the eastern seaboard market, is part of the division's program to increase production capacity by 250,000 units for 1956," McNamara explained.

"Even with the expanded capacity, there is every indication that we will continue to operate our plants at the same level during 1955."

During 1955, the division's 16 plants have worked 53 hours a week, or 13 hours overtime.

The Mahwah expansion is the second such announcement by the division in three months. The Dearborn assembly plant was placed on a two-shift schedule early in September.

Mahwah is the largest assembly plant in the Ford system, with 1,900,000 square feet of production and office space. It started operations in July on one shift, following the weekend move of production equipment from Ford's 25-year-old Edgewater, N. J., assembly plant to the new location.

Fleet Operators -

If you are using—Chevrolet, Ford, Dodge, GMC, International or Studebaker trucks, you can cut your cost per mile by installing exchange engines. But specify—



ROGERS Remanufactured ENGINES

The Finest Replacement Engine You Can Buy

It's being proved every day. Use your skilled mechanics on the heavy-duty big jobs—put the already assembled, run-in and Dynamometer tested Rogers exchange engines in the lighter units. Save time and money.

Write, wire or call the distributor nearest you.

ALABAMA:

Andalusia—Taylor Parts & Supply Co.
Anniston—Model City Parts Co.
Athens—Athens Parts Co.
Bessemer—Genuine Parts Co.
Birmingham—Alabama Auto Parts Co.
Gadsden—Genuine Parts Co.
Cullman—Alabama Auto Parts Co.
Decatur—Decatur Parts Co.
Dothan—Taylor Parts & Supply Co.
Fort Payne—Thompson Motor Supply Co.
Gadsden—Southern Auto Supply Co.
Guntersville—Barnett Auto Supply Co.
Hartselle—Auto Parts Co.
Huntsville—Automotive Parts Co.
Lexley—Griffin Motor Supply Co.
Marion—Marion Auto Supply Co.
Mobile—Motor Parts & Supply Co.
Montgomery—Motor Parts Co.
Opelika—East Alabama Auto Parts Co.
Prichard—Motor Parts & Supply Co.
Rosaire—Genuine Motor Parts Co.
Selma—Selma Parts Service Co.
Tallapoosa—Cottle Auto Supply Co.
Thomaston—Clark's Parts Service Co.
Tuscaloosa—W. Ala. Parts & Supply Co.
Wetumpka—Turners Auto Supply Co.

FLORIDA:

DeFuniak Springs—Taylor Parts & Supply Co.
Gainesville—White Elm & Bly Co.
Jacksonville—Motor Parts & Supply Co.
Marianna—Keenan Auto Parts Co.
Ocala—Lovell Brothers Co.
Orlando—Allied Parts Co., Inc.
Palm Bay—Miller Supply Co.
Pensacola—Taylor Parts & Supply Co.
Quincy—Keenan Auto Parts Co.
Sanford—Sanford Auto Parts Co.
Sarasota—Anderson Auto Parts Co.
St. Petersburg—Automotive Parts Co.
Tallahassee—Genuine Auto Parts Co.
Tampa—Keenan Auto Parts Co.
Tampa—Motor Parts Co., Inc.

GEORGIA:

Albany—Brooks Auto Parts Co.
Bryce Jones Co.
Keenan Auto Parts Co.
Alma—Butler Supply Co.
Americus—Keenan Auto Parts Co.

Atlanta—Max Auto Parts Co.
Bremen—Power Service Co.
Ashburn—Brooks Auto Parts Co.
Athens—Anderson Auto Parts Co.
Augusta—Bowers Auto Electric Co.
The Motor Supply Co.
Bainbridge—Bruce Jones Co.
Baxley—Keenan Auto Parts Co.
Baxley—Brooks Auto Parts Co.
Blakely—Keenan Auto Parts Co.
Braswell—The Motor Supply Co.
Cairo—Keenan Auto Parts Co.
Carrollton—Burris Parts Co.
Cartersville—Automotive Supply Co.
Catoosa—Auto Parts Co.
Canton—Brooks Auto Parts Co.
Cordoba—Cordoba Auto Supply Co.
Columbus—Auto Supply Co.
Cornelia—Stack's Auto Parts Co.
Cuthbert—Keenan Auto Parts Co.
Dalton—Hart's Automotive Parts Co.
Dawson—Dawson Auto Supply Co.
Decatur—Decatur Auto Parts Co.
Douglas—Brooks Auto Parts Co.
Dunwoody—Pudlin Motor Parts Co.
East Point—Genuine Parts Co.
Ederly—Anderson Auto Parts Co.
Fitzgerald—Brooks Auto Parts Co.
Gainesville—Stack's Auto Parts Co.
Glenwood—Brooks Auto Parts Co.
Hartwell—Anderson Auto Parts Co.
Hawkinsville—Keenan Auto Parts Co.
Jasper—Brooks Auto Parts Co.
LaFayette—LaFayette Auto Parts Co.
Lafayette—Piston Ring & Supply Co.
Lawrenceville—Brooks Auto Parts Co.
Macon—Butler Supply Co.
McRae—Brooks Auto Parts Co.
Montezuma—Keenan Auto Parts Co.
Moultrie—Keenan Auto Parts Co.
Newnan—Cottle's Auto Supply Co.
Perry—Brooks Auto Parts Co.
Reidsville—Nelson Sales Co.
Rome—Southern Bearing & Parts Co.
Rossville—Hart's Auto Parts Co.
Sandersville—J. B. Wall Co.
Savannah—The Motor Supply Co.
Statesboro—Statesboro Auto Parts Co.
Swainsboro—Swainsboro Motor Parts Co.
Sylvester—Flinckey's Auto Supply Co.
Thomasville—Keenan Auto Parts Co.
Thomasville—Bruce Jones Co.
Thomasville—Keenan Auto Parts Co.

Tifton—Keenan Auto Parts Co.
Toccoa—Stack Auto Parts Co.
Vidalia—Brooks Auto Parts Co.
Warner Robins—Brooks Auto Parts Co.
Waycross—Thompson Motor Supply Co.
Waynesboro—Skinner Auto Supply Co.
West Point—Cottle's Auto Supply Co.

MISSISSIPPI:

Lumberton—Motor Parts & Supply Co.

NORTH CAROLINA:

Ashville—Hayes & Hopson, Inc.
Franklin—Stack's Auto Parts Co.
Gastonia—Gastonia Parts, Inc.
Marion—Marion Auto Parts, Inc.
Spruce Pine—Mitchell Auto Parts Co.

SOUTH CAROLINA:

Aiken—Thompson Motor Supply Co.
Anderson—Anderson Auto Parts Co.
Charleston—H. Blount & Co.
Columbia—The Parts Co.
Columbia—Anderson Auto Parts Co.
Greenville—Battery & Electric Co.
Greenville—Carolina Tool Co.
Orangeburg—Parts Supply Co.
Rock Hill—Bennett Supply Co.
Spartanburg—Spartan Automotive Co.
Walterboro—H. Blount & Co.
York—York Auto Parts Co.

TENNESSEE:

Carthage—Auto Parts & Service Co.
Chattanooga—Onderton Auto Parts Co.
Chattanooga—Hart's Auto Parts Co.
Clarksville—Clarksville Auto Parts Co.
Cleveland—Hart's Auto Parts Co.
Cookeville—Auto Parts & Service Co.
Cookeville—Edwards Welding & Parts Co.
Fayetteville—City Auto Parts Co.
Gallatin—Auto Parts & Service Co.
Greenville—Brooks Butler Inc.
Hartman—Hart's Auto Parts Co.
Knoxville—Service Auto Parts Co.
Lebanon—Auto Parts & Service Co.
Maryville—Hart's Auto Parts Co.
Memphis—Brooks Butler Inc.
Pulaski—M. S. Church Auto Parts Co.
Shelbyville—Auto Parts & Service Co.
Springfield—Auto Parts & Service Co.
Winchester—Winchester Auto Supply Co.

JOHN ROGERS CO. 300 Hunnicutt St., N. W., Atlanta, Ga.

Moving to Suburbs Aids Car Sales, Alan Rude Tells Virginia Dealers

THE growth of Virginia's suburban population, typified by a 60% increase during the last five years in Richmond, was cited last month by a finance company executive as one of the factors pointing to an even brighter future for the state's automobile retailers.

Alan G. Rude, executive vice-president of Universal C.I.T. Credit Corp., said that while Richmond's suburban population had climbed to about 130,000, the in-city population since 1950 actually had shown a decline.

Around Roanoke, he said, suburban residents have gained about 40% in the same period against an increase of only about five per cent in population in the city proper.

Rude, whose firm has helped some 15,000,000 Americans buy cars in the last 40 years, spoke before the convention of the Automotive Trade Association of Virginia in the Hotel Roanoke.



Executive Vice-President Rude

The finance company executive said the growth in Virginia's population had been at the rate of about 100,000 persons a year since 1950. That means, he added, that the potential automobile market in the state is increasing by about 25,000 cars a year.

Suburban growth, he noted, is

one of the most encouraging signs, for suburbanites buy more cars than city dwellers. He said two-car families now number about 3,000,000 throughout the U. S. and will grow to about 7,500,000 in 1960.

"The second car is generally the property of the wife," he said, "and in Virginia there are 325,000 captive wives—that is, women who are stranded because their husbands drive the one family car to work. Many of them will be released from captivity soon."

While there is an "eager-beaver fringe" in the installment financing industry, just as in every business, he declared, consumer credit on the whole is sound. He maintained that only about 35% of installment debts on all consumer durable goods had more than one year to run before they were totally paid off.

Rude criticized automobile dealers for pursuing false selling practices, in the face of the fact that their product is more in demand than any other. He urged them to avoid carnival merchandising tactics and to institute and adhere to sound selling principles.

THEY'LL PAY FOR THEMSELVES THE FIRST TIME YOU USE THEM



A new Vellumoid product that makes replacing oil pans and gaskets a SNAP instead of a headache!

VELLUBOLTS

PATENT PENDING

- Screw the VELLUBOLTS into the four corners of the engine bed. Snap the gasket over the bolts, then snap the pan on over the gasket and presto! . . . the pan is locked in place while you screw in the regular bolts. Then remove the VELLUBOLTS. They can be used over and over again.
- Set of 12—fitting most cars and small trucks—\$4.95. Set of 8—fitting large trucks and busses—\$3.75. Ask your jobber.

THE VELLUMOID COMPANY
WORCESTER 6, MASS.

VELLUBOLTS — THEY WORK LIKE MAGIC!

CRANKSHAFT TRUING in the block!

Any crankpin (including No. 1) on any engine can be trued with "JOURNALIZERS" without removal of engine, dismantling of chassis, axle, steering or accessories. Removal of spark plugs and oil pan prepares the job. No costly accessory drive required for conventional or fluid drive engines. This low-cost tool can be operated by any mechanic to turn damaged and out-of-round crankpins to factory finish. Ask your jobber or write for Price Sheet and 7th Edition Journalizer Catalog which lists passenger car, truck, tractor, industrial and marine engines.

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**no road-trouble
when we use**





This group of garagemen met recently in Chattanooga, Tenn., and became an affiliate of Independent Garage Owners of Tennessee. Paid membership began with 56 men. Executive Director Ralph H. James of IGO-

America met with the group and later he and President Luther Turner and Clarence Gledhill of the Chattanooga organization went to Knoxville to spur steps aimed at forming a local group in the Knoxville Area.

Garage Organization Gathers Steam

THE Arkansas Automotive Service Station has changed its name to IGO-Arkansas, Executive Director Ralph H. James of the Independent Garage Owners of America, Inc., reported last month.

"The new unit at Bessemer, Ala., is off to a good start," he said.

The national association now has 20 allied (manufacturer) members, James said. Latest additions were K-D Manufacturing Co. of Lancaster, Pa., and Wausau Motor Parts Co. of Wausau, Wis.

Ford Plans Millions For Its Engineers

PLANS for a \$50,000,000 expansion of Ford Motor Co.'s engineering facilities at its Research and Engineering Center in Dearborn, Mich., were announced last month by Ernest R. Breech, chairman of the board.

This program, superimposed upon a current \$100,000,000 engineering expansion under way since 1947, includes the construction of five new buildings to house Ford, Mercury, Lincoln, Special Products and staff engineering activities. Also included are a new wind tunnel and an addition to the body engineering shop building.

With this expenditure, Ford's expansion and modernization program since 1946 will have cost more than \$2,400,000,000 when currently-planned projects are completed.

The five staff and product engineering buildings, all three-story structures of equal size, will add more than 1,000,000 square feet of working area to the Research and Engineering Center.

The new wind tunnel, designed to produce a wind velocity in excess of 100 mph, will be one of the largest for automotive use. It will be used for cooling, heating, air-conditioning and air stream reaction tests.

Construction will begin next spring, and the buildings are expected to be completed in the fall of 1957.

Arkansans Hear Fullbright, Elect El Dorado Man

SEN. J. W. Fullbright (D-Ark.) told the Arkansas Automobile Dealers Association recently that present U. S. tax structure does not give small business enough

earnings to withstand even a minor recession, but that his remarks were not to be construed as a criticism of big business.

Newly-elected association officers are: Milton Green, El Dorado, president; Fred Poe, Little Rock, vice-president, and W. C. Whitfield, Fayetteville, Hendrix Lakey, Mountain View, H. E. "Dolly" Parkers, Magnolia, and Carl Welch, Pine Bluff, regional vice-presidents.

Florida Dealers Set Convention

The annual convention of the Florida Automobile Dealers Association will be held at Clearwater next Oct. 21-23.

"Migoshi! Now they even brag about it!"



Million Trailers by 1960, Roy Fruehauf Predicts

By 1960 there will be a million trailers on the highways and by 1970 close to two million, according to Roy Fruehauf, president of Fruehauf Trailer Co., in a recent statement.

Truck-trailers, which carry a steadily growing share of the country's freight of all kinds, will total nearly 800,000 next year, with an increase of 100,000 over the 1955 total, he said.

Fruehauf predicted that the nation's trucking fleet, which now numbers 9,675,000 vehicles and a 7,000,000-man working force, would grow to over 10,000,000 vehicles next year and to 12,000,000 vehicles by 1960.

Sun Electric Names Malik

R. R. Malik, former executive vice-president of Sun Electric Corporation, Chicago, has been named president, according to O. L. Rhoades, founder and former president, who became chairman of the board. Malik joined the company in 1948 as controller of the firm.



Paul R. Lauritzen of Lauritzen Motors, Inc., Richmond, Va., has been chosen vice chairman of the Nash Dealer Advisory Council. Lauritzen is a past president of the Automotive Trade Association of Virginia.

Lakeland Floridians Elect

The Lakeland (Fla.) Automobile Dealers Association has elected H. S. Hill, Bunker Hill, Inc. (Dodge - Plymouth), president; Frank M. Foster, Lakeland Lincoln-Mercury, vice-president, and Robert Forslev, Lakeland Hudson Co., secretary-treasurer.

L.O.F. Fibers Creates Automotive Division

A new automotive sales division has been set up by L. O. F. Glass Fibers Co. to spotlight research, product development and sales and service activities. J. M. Johns, vice-president and director of sales, has announced. Clinton F. Hegg, vice-president, will head the new division, it was announced.

Johns said the company had spent five years of pioneering work in the development of the safety padding for the dashboard and instrument areas of modern passenger cars.

Safety has recently been given a big push through the inclusion by manufacturers of a number of safety features on cars.

Winter Haven Elects

Charlie M. Paulk, Paulk Motor Co., Inc. (Lincoln Mercury), has been named president of the Winter Haven (Fla.) Automobile Dealers Association. Russell N. Hales (Oldsmobile-Pontiac) was chosen vice-president and R. E. Gilmore, Gilmore Pontiac, secretary-treasurer.



National
triple CHROME
PIECE PLATE

WHEEL COVERS—
Specific Car Models

Beautifully chromium plated. Interchangeable with original equipment covers and applicable to other cars with 15" wheels. Fitted with National's universal attachment springs which prevent covers from SLIPPING, TURNING or SQUEAKING.

UNIVERSAL STYLE COVERS

A complete line . . . embossed Emblem Style . . . "Spinner" Bar Style . . . plain Marginal Bead Style and others in both 15" and 16" sizes. Fitted with National's universal attachment springs.

AMERICA'S MOST COMPLETE AND BEAUTIFUL LINE

Hub Caps for All Popular Cars

A complete line, heavy gauge steel, beautifully chrome plated. Engineered for perfect fit. Hub Caps for many industrial uses . . . lawn mowers, motorcycles, etc. Write us your requirements.

Tru-Seal Gas and Radiator Caps

Gas Tank Caps for most all 1930-1954 model cars, both outside and fenderwell installations. Tru-Seal Radiator Caps are available for all popular cars. Durable Metal Displays in three colors.

Wheel Parts—Exhaust Extensions

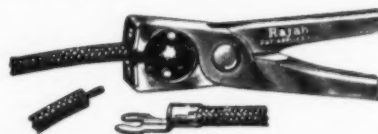
Precision manufactured for perfect fit and genuine safety. Buy the Handi-Pak way. Exhaust Extensions are heavily plated with bright nickel and chromium. Jewel adds beauty and safety.

BUY FROM YOUR JOBBER—Write for your copy of our complete catalog.



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(Chicago Suburb)

RAJAH PAT. HAND CRIMPING TOOL



**NOTE—The simplicity of this Tool
It strips and also crimps Rajah Terminals to
Ignition Cable**

Order from your jobber or direct from us.
Send for circular and prices.

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SOUTHERN AUTOMOTIVE JOURNAL

"Bet I'm the only guy in town offering tub baths!"

GM Schedules Motorama For Miami Feb. 4-12

A NEW and expanded version of General Motors' industrial show, the Motorama, will be shown in five major cities in the U. S. in 1956, President Harlow H. Curtice has announced.

The Motorama will stage a traditional opening at the Waldorf-Astoria Hotel in New York City, January 19-24, inclusive. A dramatic presentation of a new concept of future highway travel will be featured.

Public showings of the admission-free show will be held in Diner Key Auditorium, Miami, Fla., Feb. 4-12; Pan Pacific Auditorium, Los Angeles, Calif., Mar. 3-11; Civic Auditorium, San Francisco, Calif., Mar. 24-April 1 and the National Guard Armory, Boston, Mass., April 19-29.

NADA Urges Revision In Dealer Contracts

CONGRESS was told Nov. 29 that correction of the "unilateral and inequitable" contract between manufacturers and their dealers is essential if the automobile industry is to maintain itself in the public interest. The admonition came from the National Automobile Dealers Association.

Spokesman was Frederick J. Bell, executive vice-president of NADA. He led a group of witnesses who appeared before a senate judiciary

subcommittee currently studying General Motors Corp.

Bell said, "The contractual relationship between manufacturer and dealer is one-sided in favor of the manufacturer and inequitable as regards the dealer. The franchised automobile dealer is far from being the independent businessman that his factory alleges him to be. He is, in fact, part of an industry that is controlled by Detroit in virtually every business aspect."

"Because of factory pressure, threats and coercion dealers engage in practices that are unwise and contrary to their own business judgment."

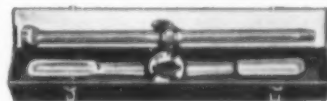
Champion Plug Moves Men in Southeast

SEVERAL changes in the Champion Spark Plug Co.'s field sales force in the Southeast have been announced.

H. C. Ficken, who has been territory representative with headquarters in Macon, Ga., has been transferred to the territory served out of Tampa, Fla., replacing L. E. Brown. F. R. Scheuing, Jr., who has been a field representative in southern Georgia, southern Alabama and the Pensacola, Fla. area, has been promoted to territory representative, replacing Ficken in Macon. Howard B. Trantum, whose home is in DeLand, Fla., has been hired as a service engineer and assigned to the Southeastern zone.

Truck Wheel Changes - a one-man job with JOB-DESIGNED Ken-TOOL IMPACT WRENCH SETS

Ken-Tool Impact Wrench Handles swing freely through a 120° arc . . . strike with tremendous force. Loosen rusted, frozen nuts fast. Long shaft keeps handle clear of truck or bus bodies.



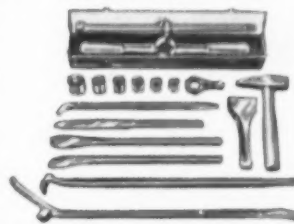
TR-42 Set
5-piece Impact Wrench Set



for all Ford and Budd Wheels.



TR-41 Set 10-piece Impact Wrench Set for 90% of popular trucks.



TR-40 Set 18-piece set—Impact Wrench plus 9 Ken-specialized Tire Changing Tools.



Budnut Wrench, a "must" for Budd and Ford wheels. Holds outer cap nut while turning inner. No chiseling necessary.

SEE YOUR JOBBER on the complete line of Job-Designed Ken-Tools. Forged by the largest exclusive manufacturer of top-quality Tire-changing Tools and Equipment. THE KEN-TOOL MFG. CO., AKRON 5, OHIO.



Alabama Dealers Honor Tucker, Name Officers

HAYSE Tucker of Tuscaloosa was named "Mr. Automobile Dealer of 1955" at the annual convention of the Automobile Dealers Association of Alabama at Birmingham last month.



Hayse Tucker

Tucker, who was one of the principal speakers at the meeting, is a former state senator and a Ford dealer 35 years.

Frank E. Davidson of Demopolis was chosen president of the asso-

ciation to succeed R. S. Hicks of Decatur.

Other officers elected were Herbert Ray, Huntsville, first vice-president; Rhea Fayssoux, Tuscaloosa, second vice-president; James Callahan, Alexander City, third vice-president and A. C. Freeman, Dothan, secretary-treasurer.

Fruehauf Trailer Acquires Hobbs' Texas Assets

FRUEHAUF Trailer Co. has acquired the truck-trailer manufacturing facilities of the Hobbs Mfg. Co. of Texas, according to a joint announcement by Roy Fruehauf, president of Fruehauf, and M. J. Neeley, who is president of Hobbs.

Fruehauf revealed that his company will "within the near future" announce the location of a new 200,000 square foot manufacturing establishment to complement the newly acquired facilities, which will be operated as Fruehauf-Hobbs of Texas, a division of Fruehauf.

William E. Grace, who for 21 years has been vice-president and general manager of Hobbs, will

continue in charge of the Fruehauf Texas operations as vice-president and general manager.

Eustace Wolfington Dies At Philadelphia

J. EUSTACE Wolfington, prominent Philadelphia, Pa., automobile dealer, died Nov. 25.

He had served on the board of directors of the National Automobile Dealers Association from 1947 through 1950. For several years he was chairman of NADA's public relations committee and was active in other NADA committee work.

He had addressed many state dealer conventions over the South and was a featured speaker at the NADA conventions in Miami, Beach, Fla., New York City and Chicago.

Atlanta SAE Hears Chesebrough

The Atlanta, Ga., Section of the Society of Automotive Engineers heard Harry E. Chesebrough, chief body engineer, Chrysler Corp., speak on "The Story behind the Forward Look" at its Dec. 5 meeting.

Ammerman's

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Newly-elected officers and directors of the Florida Automobile Dealers Association are (l. to r.): Front row, C. G. Ruebel, St. Petersburg, secretary-treasurer; J. F. Zeder, Miami, immediate past president; William H. Terry, Sr., Jacksonville, president; A. P. Clark, Orlando, first vice-president, and Charles B. Tutan, Miami, NADA director. Second row, Paul Cooper, Coral Gables, director; M. N. Kenyon, Clearwater, W. R. Harrell, Jacksonville, Dexter McCaskill, Miami, R. J. McGahey, Miami, W. L. Chance, St. Augustine, Joe Blank, West Palm Beach, M. P. Tomlinson, Lakeland, and Ralph Powers, Lake City, all district vice-presidents. Third row, Walter C. Mallory, Orlando, general manager of the association; P. C. Keeter, Gainesville, W. B. Shaw, Jr., Daytona Beach, James Hardee, Madison, I. L. Sherron, Hollywood, B. L. Holman, Vero Beach, W. G. Padrick, Ft. Pierce, Adrien A. Rivard, DeFuniak Springs, George B. Childs, Winter Haven, and J. H. Whitfield, Lake Wales, all directors. W. Theo Proctor, Tallahassee, honorary director; John A. Boyle, Tampa, director; Clarence E. Holsinger, Tampa, director; Eugene R. Elkes, Tampa, past president; Fred T. Woolverton, Jacksonville, director, and W. J. Steed, Orlando, general counsel. Other directors not shown are: O. I. Roberts, Green Cove Springs, Howard Mitchell, Pensacola, E. W. Richardson, Tallahassee, T. Willard McGahey, Miami Beach, O. J. Griffis, Leesburg, J. O. Cox, Bradenton, E. W. Williams, Palatka, and Walter A. McRae, Jacksonville, NADA director.

Ethyl Opens Houston Lab For Testing Gasoline

ETHYL Corp. has opened its newly-completed Houston, Texas, gasoline testing laboratory, which also houses the Houston district office.

The laboratory utilizes the latest equipment and methods for measurement of gasoline characteristics and offers "same day" service on test results. Tucker E. Dawson is manager.

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PERSONAL
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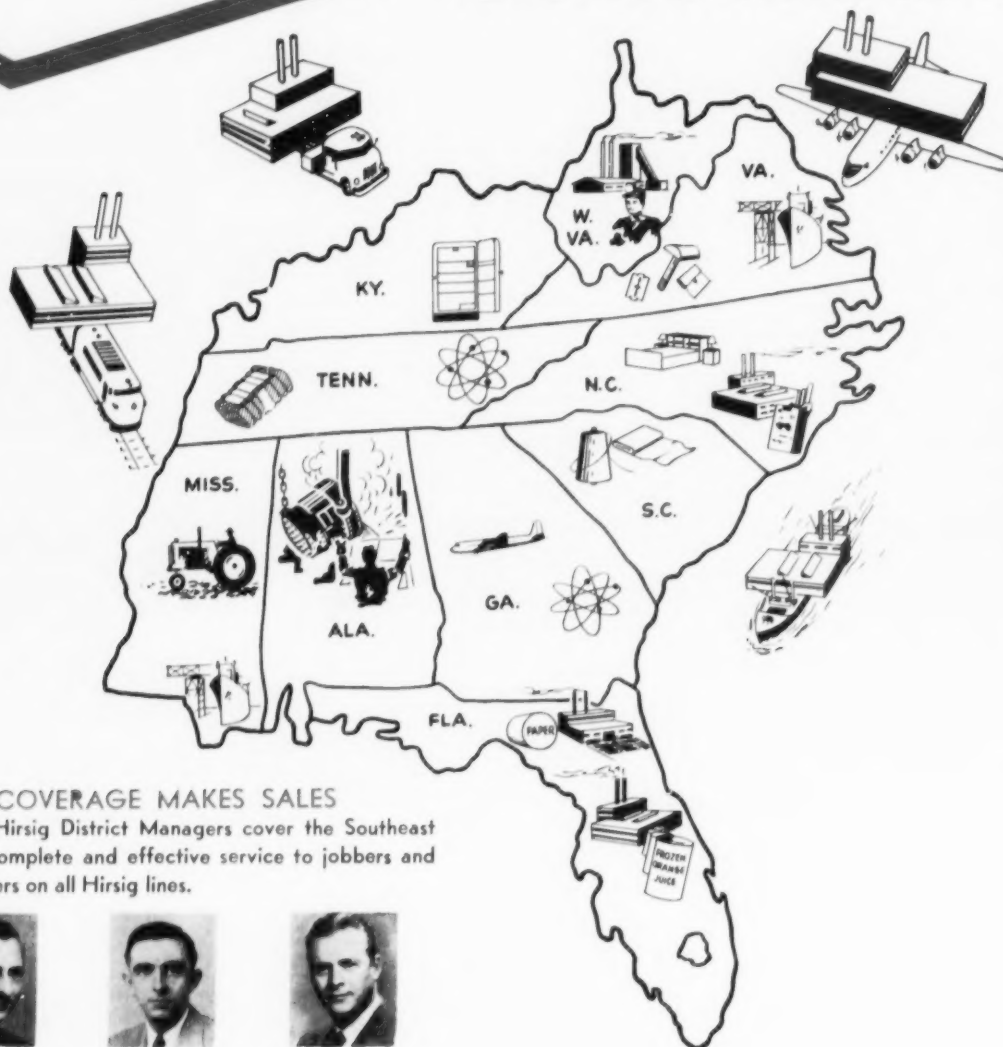
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If Dealer, Car Sold

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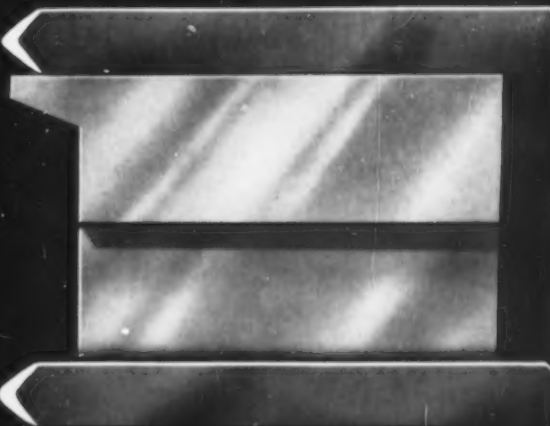
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SEATS 3 TO 4 TIMES FASTER THAN OTHER CHROME RINGS!

BEVELED CHROME RAILS

make fineline contact with cylinder wall for a faster seat. Less area to wear-in means less time to break-in.



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